

*West Virginia Department of Environmental Protection*  
Earl Ray Tomblin  
Governor

*Division of Air Quality*

Randy C. Huffman  
Cabinet Secretary

# Permit to Construct



**R13-3104**

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

*Issued to:*

**Alta Mesa Services, LP**  
**Fairmont Tools, Inc.**  
**091-00040**

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*John A. Benedict*  
*Director*

*Issued: DRAFT • Effective: DRAFT*

This permit will supercede and replace Permit R13-3104.

Facility Location: Approximately 5 miles south on Hwy 79 Fairmont. Go south on State Hwy 250 for approximately 3 miles, Taylor County, West Virginia  
Mailing Address: 15021 Katy Freeway, Suite 400, Houston, TX 77094  
Facility Description: Natural Gas Production  
NAICS Codes: 211111  
UTM Coordinates: 573.308 km Easting • 4,358.2810 km Northing • Zone 17  
Permit Type: Construction  
Description of Change: Construction of a new natural gas production facility.

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [ §§22B-1-1 et seq. ], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.*

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*The source is not subject to 45CSR30.*

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**1.0. Emission Units**

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
HT1S	HT1E	Heater Treater	2013	2.1 mmBtu/hr	None
HT2S	HT2E	Heater Treater	2013	2.1 mmBtu/hr	None
HT3S	HT3E	Heater Treater	2013	2.1 mmBtu/hr	None
HT4S	HT4E	Heater Treater	2013	2.1 mmBtu/hr	None
HT5S	HT5E	Heater Treater	2013	2.1 mmBtu/hr	None
ENG1S	ENG1E	Compressor Engine	2013	945 hp	None
DEH1S	DEH1E	TEG Dehydrator	2013	20 mmscf/day	None
REB1S	REB1E	TEG Reboiler	2013	0.25 mmBtu/hr	None
FUG1S	FUG1E	Equipment Fugitives	2013	N/A	None
FUG2S	FUG2E	Dust Fugitives	2013	N/A	None
GLY1S	GLY1E	Glycol Storage Tank	2013	750 gal	None
CON1S	CON1E	Condensate/Drip Tank	2013	8,820 gal	None
WTR1S	WTR1E	Produced Water Tank	2013	16,800 gal	None
WTR2S	WTR2E	Produced Water Tank	2013	16,800 gal	None
WTR3S	WTR3E	Produced Water Tank	2013	16,800 gal	None
WTR4S	WTR4E	Produced Water Tank	2013	16,800 gal	None
WTR5S	WTR5E	Produced Water Tank	2013	16,800 gal	None
WTR6S	WTR6E	Produced Water Tank	2013	16,800 gal	None
WTR7S	WTR7E	Produced Water Tank	2013	16,800 gal	None
WTR8S	WTR8E	Produced Water Tank	2013	16,800 gal	None
WTR9S	WTR9E	Produced Water Tank	2013	16,800 gal	None
WTR10S	WTR10E	Produced Water Tank	2013	16,800 gal	None
LOD1S	LOD1E	Condensate/Drip Tank Loading	2013	30,000 gal/yr	None
LOD2S	LOD2E	Produced Water Tank Loading	2013	2,682,750 gal/yr	None

## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the “West Virginia Air Pollution Control Act” or the “Air Pollution Control Act” mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The “Clean Air Act” means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. “Secretary” means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary’s designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>2.5</sub></b>	Particulate Matter less than 2.5 μm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10μm in diameter
<b>CO</b>	Carbon Monoxide	<b>Ppb</b>	Pounds per Batch
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>Pph</b>	Pounds per Hour
<b>DAQ</b>	Division of Air Quality	<b>Ppm</b>	Parts per Million
<b>DEP</b>	Department of Environmental Protection	<b>Ppm<sub>v</sub> or ppmv</b>	Parts per Million by Volume
<b>dscm</b>	Dry Standard Cubic Meter	<b>PSD</b>	Prevention of Significant Deterioration
<b>FOIA</b>	Freedom of Information Act	<b>Psi</b>	Pounds per Square Inch
<b>HAP</b>	Hazardous Air Pollutant	<b>SIC</b>	Standard Industrial Classification
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>M</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>MDHI</b>	Maximum Design Heat Input	<b>USEPA</b>	United States Environmental Protection Agency
<b>MM</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA</b>	Not Applicable	<b>VOL</b>	Volatile Organic Liquids
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### **2.3. Authority**

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

### **2.4. Term and Renewal**

- 2.4.1. This permit supersedes and replaces previously issued Permit R13-3104. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

### **2.5. Duty to Comply**

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-3104, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;  
**[45CSR§§13-5.11 and 10.3.]**
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

### **2.6. Duty to Provide Information**

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

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**2.7. Duty to Supplement and Correct Information**

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

**2.8. Administrative Update**

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4.]

**2.9. Permit Modification**

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

**2.10 Major Permit Modification**

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

**2.11. Inspection and Entry**

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

**2.12. Emergency**

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by

improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

### **2.13. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

### **2.14. Suspension of Activities**

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

### **2.15. Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.

**2.16. Severability**

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

**2.17. Transferability**

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1.]

**2.18. Notification Requirements**

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

**2.19. Credible Evidence**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40CFR§61.145(b) and 45CSR§34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1] *[State Enforceable Only]*
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.  
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.  
[45CSR§11-5.2.]

#### 3.2. Monitoring Requirements

*[Reserved]*

#### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary

exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
  1. The permit or rule evaluated, with the citation number and language;
  2. The result of the test for each permit or rule condition; and,
  3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

### 3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded

in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

- 3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.  
**[45CSR§4. State Enforceable Only.]**

### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street  
Charleston, WV 25304-2345

**If to the US EPA:**

Associate Director  
Office of Air Enforcement and Compliance Assistance  
(3AP20)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

#### 3.5.4. Operating Fee

- 3.5.4.1. In accordance with 45CSR22 – Air Quality Management Fee Program, the permittee shall not operate nor cause to operate the permitted facility or other associated facilities on the same or contiguous sites comprising the plant without first obtaining and having in current effect a Certificate to Operate (CTO). Such Certificate to Operate (CTO) shall be renewed annually, shall be maintained on the premises for which the certificate has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.4.2. In accordance with 45CSR22 – Air Quality Management Fee Program, enclosed with this permit is an Application for a Certificate to Operate (CTO). The CTO will cover the time period beginning with the date of initial startup through the following June 30. Said application and the appropriate fee shall be submitted to this office prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with Section 4.5 of 45CSR22. A copy of this schedule may be found on the reverse side of the CTO application.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

#### 4.0. Source-Specific Requirements

##### 4.1. Limitations and Standards

4.1.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

4.1.2. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the facility shall be less than 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the facility is a minor HAP source.

4.1.3. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

**[45CSR§13-5.11.]**

4.1.4. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

## 5.0. Source-Specific Requirements (Heater Treaters, HT1S, HT2S, HT3S, HT4S, HT5S)

### 5.1. Limitations and Standards

- 5.1.1. Maximum Design Heat Input. The maximum design heat input for the Heater Treaters (HT1S through HT5S) shall not exceed 2.1 mmBtu/hr.
- 5.1.2. The quantity of natural gas that shall be consumed in the 2.1 mmBtu/hr Heater Treaters (HT1S through HT5S) shall not exceed 2,000 scf per hour and 17.52 mmscf/yr.
- 5.1.3. Maximum emission from each 2.1 mmBtu/hr Heater Treater (HT1S through HT5S) shall not exceed the following limits:

Pollutants	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emission (tpy)
Nitrogen Oxides (NOx)	0.20	0.88
Carbon Monoxide (CO)	0.17	0.74
Volatile Organic Compounds (VOC)	0.01	0.05

- 5.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.  
**[45CSR§2-3.1.]**

### 5.2. Monitoring Requirements

- 5.2.1. For the purpose of determining compliance with the opacity limits of 45CSR2, the permittee shall conduct visible emission checks and/or opacity monitoring and recordkeeping for the Heater Treaters (HT1S through HT5S).

The visible emission check shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of

uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 certification course.

Visible emission checks shall be conducted at least once per calendar month with a maximum of forty-five (45) days between consecutive readings. These checks shall be performed at each source for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Visible emission checks shall be performed during periods of facility operation and appropriate weather conditions.

If visible emissions are present at a source(s) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

### **5.3. Testing Requirements**

- 5.3.1. Compliance with the visible emission requirements of section 5.1.4 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9, Method 22, or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of section 5.1.4. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

### **5.4. Recordkeeping Requirements**

- 5.4.1. To demonstrate compliance with section 5.1.2, the permittee shall maintain records of the amount of natural gas consumed in the Heater Treater (HT1S through HT5S). Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 5.4.2. The permittee shall maintain records of all monitoring data required by Section 5.2.1 documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80 F, 6 - 10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.

### **5.5. Reporting Requirements**

- 5.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following

information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

## 6.0. Source-Specific Requirements (Compressor Engine, ENG1S)

### 6.1. Limitations and Standards

- 6.1.1. The quantity of natural gas that shall be consumed in the 945 bhp natural gas reciprocating engine, Caterpillar G3512 (ENG1S) shall not exceed 6,782 cubic feet per hour (cf/hr) or 59.41 million cubic feet per year (MMcf/yr).
- 6.1.2. Maximum emission from the 945 hp natural gas fired reciprocating engine, Caterpillar G3512 (ENG1E) shall not exceed the following limits:

Pollutants	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emission (tpy)
Nitrogen Oxides (NOx)	4.17	18.25
Carbon Monoxide (CO)	3.72	16.43
Volatile Organic Compounds (VOC)	0.65	2.83
Formaldehyde	0.52	2.28

### 6.2. Monitoring Requirements

- 6.2.1. See Facility-Wide Monitoring Requirements in Section 3.2 and Monitoring Requirements in Section 7.5.

### 6.3. Testing Requirements

- 6.3.1. See Facility-Wide Testing Requirements in Section 3.3 and Testing Requirements in Section 7.5.

### 6.4. Recordkeeping Requirements

- 6.4.1. To demonstrate compliance with sections 6.1.1 through 6.1.4, the permittee shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 6.4.2. To demonstrate compliance with section 6.1.5, the permittee shall maintain records of all catalytic reduction device maintenance. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 6.4.3. See Facility-Wide Recordkeeping Requirements 3.4 and Recordkeeping Requirements 7.6.

**7.0. Source-Specific Requirements (40 CFR 60 Subpart JJJJ Requirements for ENG1S)**

**7.1. General Limitations and Standards**

7.1.1. The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(a)(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP [40CFR§60.4230(a)(4)(ii)]

**7.2. Emission Standards for Owners and Operators**

7.2.1. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards (g/HP-hr)		
			NOx	CO	VOC
Non-Emergency SI Lean Burn Natural Gas	500≤HP<1,350	1/1/2008	2.0	4.0	1.0

[40CFR§60.4233(e)]

7.2.2. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in § 60.4233 over the entire life of the engine. [40CFR§60.4234]

**7.3. Other General Requirements for Owners and Operators**

7.3.1. After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in § 60.4233. [40CFR§60.4236(a)]

7.3.2. After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in § 60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in § 60.4233 may not be installed after January 1, 2010. [40CFR§60.4236(b)]

- 7.3.3. For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in § 60.4233 after January 1, 2011. [40CFR§60.4236(c)]
- 7.3.4. In addition to the requirements specified in §§ 60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section. [40CFR§60.4236(d)]
- 7.3.5. The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. [40CFR§60.4236(e)]

#### **7.4. Compliance Requirements for Owners and Operators**

- 7.4.1. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in § 60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
- (b)(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.
- (b)(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in § 60.4233(d) or (e) and according to the requirements specified in § 60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
- (b)(2)(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.  
[40CFR§60.4243(b)(1)(2)(ii)]
- 7.4.2. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of § 60.4233. [40CFR§60.4243(e)]

#### **7.5. Monitoring and Testing Requirements**

- 7.5.1. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.
- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in § 60.8 and under the specific conditions that are specified by Table 2 to this subpart.

- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NOX in g/HP-hr.

Cd = Measured NOX concentration in parts per million by volume (ppmv).

1.912×10<sup>-3</sup> = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

Cd = Measured CO concentration in ppmv.

1.164×10<sup>-3</sup> = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

- (f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.

Cd = VOC concentration measured as propane in ppmv.

$1.833 \times 10^{-3}$  = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.  
Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.  
T = Time of test run, in hours.  
HP-hr = Brake work of the engine, in HP-hr.

- (g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{mi}}{C_{Ai}} \quad (\text{Eq. 4})$$

Where:

RF<sub>i</sub> = Response factor of compound i when measured with EPA Method 25A.

CM<sub>i</sub> = Measured concentration of compound i in ppmv as carbon.

CA<sub>i</sub> = True concentration of compound i in ppmv as carbon.

$$C_{i\text{ corr}} = RF_i \times C_{i\text{ meas}} \quad (\text{Eq. 5})$$

Where:

C<sub>i corr</sub> = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C<sub>i meas</sub> = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{\text{Peq}} = 0.6098 \times C_{i\text{ corr}} \quad (\text{Eq. 6})$$

Where:

C<sub>Peq</sub> = Concentration of compound i in mg of propane equivalent per DSCM.

[40CFR§60.4244(a), (b), (c), (d), (e), (f), (g)]

## 7.6. Notification, Reports, Recordkeeping Requirements

- 7.6.1. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (2) Maintenance conducted on the engine.
  - (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
  - (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to § 60.4243(a)(2), documentation that the engine meets the emission standards. [40CFR§60.4245(a)]

- 7.6.2. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in § 60.4231 must submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
- (1) Name and address of the owner or operator;
  - (2) The address of the affected source;
  - (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - (4) Emission control equipment; and
  - (5) Fuel used.  
[40CFR§60.4245(c)]
- 7.6.3. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed. [40CFR§60.4245(d)]

## **8.0. Source-Specific Requirements (40 CFR 63 Subpart ZZZZ Requirements for ENG1S)**

### **8.1. General Limitations and Standards**

- 8.1.1. You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.
- (c) An area source of HAP emissions is a source that is not a major source.  
[40CFR§63.6585(c)]
- 8.1.2. Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
- (c)(1) A new or reconstructed stationary RICE located at an area source.  
[40CFR§63.6590(c)(1)]

## **9.0. Source-Specific Requirements (TEG Dehydrator, DEH1S, REB1S)**

### **9.1. Limitations and Standards**

- 9.1.1. Maximum Throughput Limitation. The maximum wet natural gas throughput to the TEG dehydration unit/still column (DEH1S) shall not exceed 20 million standard cubic feet per day (MMscfd). Compliance with the maximum throughput limitation shall be determined using a twelve month rolling total shall mean the sum of the monthly throughput at any given time during the previous twelve consecutive calendar months.

- 9.1.2. For purposes of determining potential HAP emissions to comply with the requirements in Section 4.1.2, the methods specified in 40 CFR 63, Subpart HH (excluding compressor engines from HAP PTE) shall be used.
- 9.1.5. Maximum emissions from the TEG Dehydrator Still Vent and Reboiler (DEH1E, REB1E) shall not exceed the following limits.

Pollutants	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emission (tpy)
Nitrogen Oxides (NOx)	0.02	0.10
Carbon Monoxide (CO)	0.02	0.09
Volatile Organic Compounds (VOC)	15.72	68.84
Benzene	0.10	0.02
n-Hexane	0.50	2.17
Toluene	0.02	0.09

## 9.2. Monitoring Requirements

- 9.2.1. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system and the natural gas fed to the natural gas reboiler (REB1S) on a monthly basis for the glycol dehydration unit (DEH1S).
- 9.2.2. The permittee shall monitor and record bi-monthly the following actual input parameters for GRI GLYcalc V3 or higher. (1) Wet gas or contactor temperature/degrees F; (2) Wet gas or contactor pressure/psig; (3) Lean glycol flow rate/gpm (in lieu of this parameter, 3.0 gal/lb H2O may be used); (4) Dry gas water content/lbH2O)/MMscf (in lieu of this parameter, 7 lb/MMscf may be used).

## 9.3. Testing Requirements

- 9.3.1. Compliance with Section 4.1.2 and Section 10, shall be determined by using GRIGlyCalc Version 3.0 or higher, sampled in accordance with the Gas Processor Association GPA Method 2166 and analyzed in accordance with Method 2286. Representative gas sample collection and analysis frequency for dehydration units shall be determined based on the level of HAP emissions from the glycol dehydration unit of the affected facility as set forth in the schedule provided in the table below. The minimum frequency stated in the table does not relieve the affected facility from the requirement to appropriately account for process or feed gas changes that could affect minor source status and the less than 1 ton/year of Benzene Exemption or prevent the affected facility from conducting more frequent sampling and analysis and producing a representative average composition.

Wet Gas Sampling and Analysis Frequency for Dehydration Units Based on Potential HAP Emission Rates	
Permitted Emission Rate as a Percentage of Major Individual (10 TPY) or Total HAPs (25 TPY) Thresholds in TPY or a Percentage of Benzene Emissions as determined by GRI-GlyCalc v. 3.0 or higher	Minimum Default Frequency
Every dehydration unit (regardless of permitted emission rate)	An initial compliance test within 180 days of permit issuance or within 180 days of start-up of the dehydration unit,

<p>Every dehydration unit at or above 95% of HAPs major source levels or 0.95 tons per year of Benzene</p>	<p style="text-align: center;">whichever is later</p> <p>The permittee shall sample and perform a wet gas analysis at least once each year for determining compliance with the HAP limits in the issued General Permit Registration per the procedures in Section 9.3. The 0.95 tons per year of Benzene requirement only applies to permittees using Section 13 of this permit without federally enforceable controls.</p>
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Note: The DAQ defines a representative wet gas sample to be one that is characteristic of the average gas composition dehydrated throughout a calendar year. If an isolated sample is not indicative of the annual average composition, then a company may opt to produce a weighted average based on throughput between multiple sampling events, which can be used to define a more representative average annual gas composition profile.

- 9.3.2. The permittee must input operating parameters that provide the highest HAP emissions (i.e. maximum design rate of lean glycol recirculation rate) when using GRI-GLYCalc V3 or higher or the permittee must input parameters based on an annual average, and update the GlyCalc analysis annually. This provision does not change the frequency of the wet gas analysis as specified in Section 9.3.1. The permittee shall document how they determined the annual average value or highest single measured value, at a minimum, for the following input parameters: (1) Wet gas temperature/degrees F; (2) Wet gas pressure/psig; (3) Lean glycol flow rate/gpm (in lieu of this parameter, 3.0 gal/lb H2O may be used); (4) Dry gas water content/ lb H2O/mmscf (in lieu of this parameter, 7 lb/MMscf may be used).

**9.4. Recordkeeping Requirements**

- 9.4.1. The permittee shall maintain a record of the monthly wet natural gas throughput through the glycol dehydration unit and the natural gas reboiler to demonstrate compliance with section 9.1.1 and 9.1.5 of this permit. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 9.4.2. For the purpose of demonstrating compliance with the limits set forth in section 4.1.2, the permittee shall maintain records of the flow rate measurements and wet gas analysis made during the initial compliance determination or subsequent compliance determinations in accordance with Section 9.3. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 9.4.3. The permittee shall maintain records of the GLYCalc analysis as required by section 9.3 of this permit. Said records shall include a printout of the aggregate calculations report, which shall include emissions reports, equipment reports, and stream reports. The permittee shall maintain bimonthly records of the input parameters required by section 9.2.2. Such records shall be retained for at least 5 years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. A responsible official shall certify any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director.

## 9.5. Reporting Requirements

- 9.5.1. The permittee shall submit the wet gas analysis report required by section 9.3.1 of this permit within 60 days of conducting the sampling of the wet gas stream as required. This report shall include a potential to emit (PTE) estimate using GRI-GlyCalc Version 3.0 or higher, incorporating the specific parameters measured as referenced in section 9.2.2, as well as a copy of the laboratory analysis.
- 9.5.2. If the results of the compliance determination conducted as required in Section 9.3 predict the emission(s) to be greater than 9.4 tons per year for any single HAP, or a combined total of HAPs greater than 24.4 tons per year, the permittee shall submit such determination and all supporting documentation to the Director within 15 days after making such determination.

## 10.0. Source-Specific Requirements (Exemption, Less than 1 ton/year Benzene Exemption Subpart HH)

### 10.1. Limitations and Standards

- 10.1.1. Any permittee who chooses to qualify for the less than 1.0 tons/yr actual average emissions of Benzene per glycol dehydration unit exemption of 40CFR63 Subpart HH or HHH shall comply with the limit in Table 1.0.

Table 1.0 Glycol Dehydration Unit

Description	Mg/yr	Tons/yr
Benzene	<0.9	<1.0

- 10.1.2. To claim less than 1 ton/year of Benzene exemption as stated in Section 13.1.1 of this permit, the permittee shall adhere to the following:
- The actual average emissions of benzene from the individual still vent of the glycol dehydration unit to the atmosphere shall be less than 1.0 ton per year (0.9 megagram per year). Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.  
**[\$63.764(e)(1)(ii) or §63.1274(d)(2)]**
  - The permittee shall determine the actual average benzene emission using the model GRIGLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRIGLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (CGR-95/0368.1); **or** The permittee shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods set forth in either 40 CFR 63.772(b)(2)(ii) or 40 CFR 63.1282(a)(2)(ii), as applicable. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year. Permittees with federally enforceable controls are exempt from the requirements to conduct site-specific extended gas analysis.  
**[\$63.772(b)(2)(i)-(ii) or §63.1282(a)(2)(i)-(ii)]**
  - All records required under Section 13 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized

representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

## 11.0. Source-Specific Requirements (Storage Tanks, GLY1S, CON1S, Loadout Rack, LOD1S)

### 11.1. Limitations and Standards

- 11.1.1. The maximum quantities specified in the table below shall not be exceeded for each loading operation.

Liquid Name	Maximum Daily Throughput (gal/day)	Maximum Yearly Throughput (gal/yr)
Condensate	82.2	30,000
Produced Water	7,350	2,682,750

Compliance with the Maximum Daily Throughput Limitation shall be determined using a 24 hour period. Compliance with the Maximum Yearly Operation Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

- 11.1.2. The Dehydrator Glycol Tank (GLY1S) shall be designed and operated in accordance with the information file in permit application R13-3104.
- 11.1.3. The maximum throughput to the Condensate/Drip Tank shall not exceed 30,000 gallons per year.
- 11.1.4. The maximum throughput to the Produced Water Tank shall not exceed 2,682,750 gallons per year.
- 11.1.5. *Emissions determination.* The permittee shall determine the VOC emissions for the condensate and produced water storage tanks (CON1S, WTR1S – WTR10S).

For the storage tanks (CON1S, WTR1S – WTR10S), the permittee must determine the VOC emission rate using any generally accepted model or calculation methodology within 30 days after startup per the methods specified in 40 CFR 60 Subpart OOOO, and minimize emissions to the extent practicable during the 30-day period using good engineering practices. For each storage vessel affected facility emitting more than 6 tpy VOC, the permittee must reduce VOC emissions by 95.0 percent or greater within 60 days after startup.

**[45CSR§13-5.11] [§60.5365]**

- 11.1.6. The permittee is required to sample the pressurized liquid streams, aqueous and organic, coming from the last separator that feeds the storage tanks (CON1S, WTR1S – WTR10S) within 180 days of permit issuance or within 180 days of startup of the storage tanks (CON1S, WTR1S – WTR10S), whichever is later.
- 11.1.7. The permittee shall re-evaluate the VOC potential emission rate for the storage tanks (CON1S, WTR1S – WTR10S) in accordance with section 11.1.5 within 90 days.
- 11.1.8. The Condensate & Produced Truck Loading shall be operated in accordance with the plans and specifications filed in Permit Application R13-3104. All condensate/produced-water trucks shall be loaded using the submerged-fill method. The “submerged-fill method” shall, for the purposes of this permit, mean either bottom-filling or filling by extending the pipe to near the bottom of the tank, and as soon as is practicable, below the level of liquid.

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## 11.2. Monitoring Requirements

- 11.2.1. The permittee shall monitor the throughput to the loading operations and tanks on a monthly basis.
- 11.2.2. *Flash emissions from uncontrolled storage tanks.* The permittee shall monitor the temperature and pressure of the last separation unit prior to the storage tanks (CON1S, WTR1S – WTR10S) at a minimum frequency of once per calendar month.

## 11.3. Recordkeeping Requirements

- 11.3.1. For the purpose of demonstrating compliance with section 11.1.1 and 11.2.1, the permittee shall maintain records of the amount of condensate and produced water loaded.
- 11.3.2. All records required under Section 11.3 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
- 11.3.3. Upon request by the Director, the permittee shall report deviations within a requested time from of any occurrences when the control device was operated outside of the parameters defined in the monitoring plan.
- 11.3.4. For the purpose of demonstrating compliance with section 11.1.3 and 11.1.4, the permittee shall maintain records of the maximum tank throughput of the condensate and produced water tanks (CON1S, WTR1S – WTR10S)
- 11.3.5. For the purpose of demonstrating compliance with section 11.1.5, the permittee shall maintain records of the determination of the VOC emission rate for the storage tanks (CON1S, WTR1S – WTR10S), including identification of the model or calculation methodology used to calculate the VOC emission rate.
- 11.3.6. For the purpose of demonstrating compliance with sections 11.1.6 and 11.1.7, the permittee shall maintain records of any sample analysis and the re-evaluation of the VOC potential emission rate.
- 11.3.7. For the purpose of demonstrating compliance with section 11.2.2, the permittee shall maintain records of the temperature and pressure of the last separation unit prior to the storage tanks (CON1S, WTR1S – WTR10S) on a monthly basis.
- 11.3.8. All records required under Section 11.3 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

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### CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup> \_\_\_\_\_  
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title \_\_\_\_\_  
(please print or type) Name Title

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

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<sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
  - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.