

West Virginia Department of Environmental Protection  
Division of Air Quality

*Earl Ray Tomblin*  
Governor

*Randy C. Huffman*  
Cabinet Secretary

# Permit to Operate



Pursuant to  
**Title V**  
of the Clean Air Act

*Issued to:*

**Cranberry Pipeline Corporation**  
Bradley Compressor Station, Fanrock, WV  
R30-10900017-2012

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*John A. Benedict*  
Director

*Expiration: [Date of issuance] • Effective: [Equals issue date plus two weeks]*  
*[5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]*

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Permit Number: **R30-10900017-2012**  
Permittee: **Cranberry Pipeline Corporation**  
Facility Name: **Bradley Compressor Station**  
Permittee Mailing Address: **5 Penn Center West, Suite 401, Pittsburgh, PA 15276-0120**

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*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

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Facility Location:	Fanrock, Wyoming County, West Virginia
Facility Mailing Address:	WV State Route 97, Fanrock, WV 24834
Telephone Number:	304-732-9219
Type of Business Entity:	Corporation
Facility Description:	Natural Gas Processing
SIC Codes:	1311
UTM Coordinates:	443.5 km Easting • 4155.3 km Northing • Zone 17

Permit Writer: Wayne Green

*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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*Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

**Table of Contents**

**1.0. Emission Units and Active R13, R14, and R19 Permits..... 3**

**2.0. General Conditions..... 4**

**3.0. Facility-Wide Requirements and Permit Shield.....13**

**Source-specific Requirements**

**4.0. Reciprocating Internal Combustion Engines.....21**

**5.0. Dehydration Reboiler and Dehydration Still Vent..... 37**

## 1.0 Emission Units and Active R13, R14, and R19 Permits

### 1.1 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001-03	006*	Caterpillar Engine - CAT G3508TA	2007	515 HP	None
001-04	010*	Dehydration Reboiler - Petrofab	1995	2,000 ft <sup>3</sup> / hr	None
001-09	009*	Compressor Engine - White Superior 8GT825	1995	1100 HP	None
001-0A	011	Dehydration Still Vent - Petrofab	1995	1.67 mmft <sup>3</sup> / hr	None
001-0B	012*	Compressor Engine - CAT G3516LE	1997	1150 HP	None
001-0C	013*	Compressor Engine - CAT G3606TA	2004	1775 HP	None
<b>Tanks</b>					
Tank01	01	New Oil - Tank 1	2002	2000 Gallons	None
Tank02	02	New Oil - Tank 2	2002	3000 Gallons	None
Tank03	03	New Oil - Tank 3	2002	3000 Gallons	None
Tank04	04	Used Oil - Tank 4	2002	3000 Gallons	None
Tank05	05	Used Glycol - Tank 5	2006	500 Gallons	None
Tank06	06	Condensate - Tank 6	2006	2100 Gallons	None
Tank07	07	Used Antifreeze - Tank 7	2008	500 Gallons	None
Tank08	08	Used Glycol – Tank 8	2008	500 Gallons	None
Tank09	09	New Glycol – Tank 9	2010	2000 Gallons	None

\*This equipment only burns pipeline quality natural gas.

### 1.2 Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2127E	August 7, 2007

## 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.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

### 2.2 Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NSPS</b>	New Source Performance Standards
<b>CBI</b>	Confidential Business Information	<b>PM</b>	Particulate Matter
<b>CEM</b>	Continuous Emission Monitor	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CES</b>	Certified Emission Statement	<b>pph</b>	Pounds per Hour
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>ppm</b>	Parts per Million
<b>CO</b>	Carbon Monoxide	<b>PSD</b>	Prevention of Significant Deterioration
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>psi</b>	Pounds per Square Inch
<b>DAQ</b>	Division of Air Quality	<b>SIC</b>	Standard Industrial Classification
<b>DEP</b>	Department of Environmental Protection	<b>SIP</b>	State Implementation Plan
<b>FOIA</b>	Freedom of Information Act	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>HAP</b>	Hazardous Air Pollutant	<b>TAP</b>	Toxic Air Pollutant
<b>HON</b>	Hazardous Organic NESHAP	<b>TPY</b>	Tons per Year
<b>HP</b>	Horsepower	<b>TRS</b>	Total Reduced Sulfur
<b>lbs/hr or lb/hr</b>	Pounds per Hour	<b>TSP</b>	Total Suspended Particulate
<b>LDAR</b>	Leak Detection and Repair	<b>USEPA</b>	United States Environmental Protection Agency
<b>m</b>	Thousand	<b>UTM</b>	Universal Transverse Mercator
<b>MACT</b>	Maximum Achievable Control Technology	<b>VEE</b>	Visual Emissions Evaluation
<b>mm</b>	Million	<b>VOC</b>	Volatile Organic Compounds
<b>mmBtu/hr</b>	Million British Thermal Units per Hour		
<b>mmft<sup>3</sup>/hr or mmcf/hr</b>	Million Cubic Feet Burned per Hour		
<b>NA or N/A</b>	Not Applicable		
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		
<b>NO<sub>x</sub></b>	Nitrogen Oxides		

### **2.3. Permit Expiration and Renewal**

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.  
**[45CSR§30-5.1.b.]**
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.  
**[45CSR§30-4.1.a.3.]**
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.  
**[45CSR§30-6.3.b.]**
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.  
**[45CSR§30-6.3.c.]**

### **2.4. Permit Actions**

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
**[45CSR§30-5.1.f.3.]**

### **2.5. Reopening for Cause**

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
  - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
  - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

## **2.6. Administrative Permit Amendments**

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

## **2.7. Minor Permit Modifications**

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

## **2.8. Significant Permit Modification**

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.

[45CSR§30-6.5.b.]

## **2.9. Emissions Trading**

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

## **2.10. Off-Permit Changes**

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
- b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- c. The change shall not qualify for the permit shield.
- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

**[45CSR§30-5.9.]**

## **2.11. Operational Flexibility**

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

**[45CSR§30-5.8]**

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

**[45CSR§30-5.8.a.]**

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

**[45CSR§30-5.8.c.]**

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

## **2.12. Reasonably Anticipated Operating Scenarios**

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
  - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
  - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

## **2.13. Duty to Comply**

- 2.13.1. 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; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

## **2.14. Inspection and Entry**

- 2.14.1. 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;

- 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.

[45CSR§30-5.3.b.]

## **2.15. Schedule of Compliance**

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

## **2.16. Need to Halt or Reduce Activity not a Defense**

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would 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.

[45CSR§30-5.1.f.2.]

## **2.17. Emergency**

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably 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.

[45CSR§30-5.7.a.]

- 2.17.2. 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 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. 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. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, 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, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

## **2.18. Federally-Enforceable Requirements**

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

## **2.19. Duty to Provide Information**

- 2.19.1. 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 modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required 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.

[45CSR§30-5.1.f.5.]

## **2.20. Duty to Supplement and Correct Information**

- 2.20.1. 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.

[45CSR§30-4.2.]

## **2.21. Permit Shield**

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

**[45CSR§30-5.6.a.]**

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

**[45CSR§30-5.6.c.]**

## **2.22. Credible Evidence**

2.22.1. 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 defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

**[45CSR§30-5.3.e.3.B. and 45CSR38]**

## **2.23. Severability**

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

**[45CSR§30-5.1.e.]**

## **2.24. Property Rights**

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

**[45CSR§30-5.1.f.4]**

## **2.25. Acid Deposition Control**

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
  - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
  - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

**[45CSR§30-5.1.d.]**

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

**[45CSR§30-5.1.a.2.]**

### 3.0 Facility-Wide Requirements

#### 3.1 Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person 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 or allow 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.  
**[40 C.F.R. § 61.145 (b) and 45CSR34]**
- 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. **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]**
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.  
**[W.Va. Code § 22-5-4(a)(14)]**
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

**[40 C.F.R. 82, Subpart F]**

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

**[40 C.F.R. 68]**

- 3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.

**[45CSR§17-3.1, State Enforceable Only]**

### **3.2. Monitoring Requirements**

- 3.2.1. The permittee shall monitor the amount of natural gas consumed by the engines and reboiler on a daily, monthly, and yearly basis. Compliance with the yearly limit shall be determined by using a 12 month rolling total.

**[45CSR13, R13-2127, 4.2.2]**

### **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, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are 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.

- 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 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.
  3. A statement of compliance or non-compliance with each permit or rule condition.

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

### **3.4. Recordkeeping Requirements**

- 3.4.1. **Monitoring information.** 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.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.  
**[45CSR§30-5.1.c.2.B.]**
- 3.4.3. **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§30-5.1.c. State-Enforceable only.]**
- 3.4.4. The permittee shall maintain records of natural gas consumption rates for the natural gas compressor engines and the reboiler and the hours of operation of the compressor engines and the reboiler. Annual records shall include, but not limited to: the quantity of natural gas combusted, moisture content, volatile matter content, and Btu content of the fuel. Said records shall be maintained on site for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon submittal.  
**[45CSR13, R13-2127, 4.4.2]**

### **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.  
**[45CSR§§30-4.4. and 5.1.c.3.D.]**
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.  
**[45CSR§30-5.1.c.3.E.]**
- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, 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, mailed first class or by private carrier 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 SE  
Charleston, WV 25304  
  
Phone: 304/926-0475  
FAX: 304/926-0478

**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. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.  
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: [R3\\_APD\\_Permits@epa.gov](mailto:R3_APD_Permits@epa.gov). The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.  
[45CSR§30-5.3.e.]
- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.  
[45CSR§30-5.1.c.3.A.]
- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.
- 3.5.8. **Deviations.**
- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

**[45CSR§30-5.1.c.3.C.]**

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

**[45CSR§30-5.1.c.3.B.]**

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

**[45CSR§30-4.3.h.1.B.]**

### **3.6. Compliance Plan**

- 3.6.1. None

### **3.7. Permit Shield**

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

<b>45 C.S.R. 21</b>	To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds. The Bradley Compressor Station is not located in Cabell, Kanawha, Putnam, Wayne, or Wood counties.
<b>45 C.S.R. 27</b>	To Prevent and Control the Emissions of Toxic Air Pollutants. Natural gas is included as a petroleum product and contains less than 5% benzene by weight. C.S.R. § 45-27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”
<b>40 C.F.R. Part 60 Subpart GG</b>	Standards of Performance for Stationary Gas Turbines. There are no turbines located at the Bradley Compressor Station.
<b>40 C.F.R. Part 60 Subparts K, Ka</b>	Standards of Performance for Storage Vessels for Petroleum Liquids. All tanks at the Bradley Compressor Station are below 40,000 gallons in capacity.
<b>40 C.F.R. Part 60 Subpart Kb</b>	Standards of Performance for Volatile Organic Liquid Storage Vessels. All tanks storing volatile organic liquids at the Bradley Compressor Station are below 75 m <sup>3</sup> in capacity.
<b>40 C.F.R. Part 60 Subpart KKK</b>	Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. The Bradley Compressor Station is not engaged in the extraction of natural gas liquids from field gas or in the fractionation of mixed natural gas liquids to natural gas products.
<b>40 C.F.R. Part 60 Subpart IIII</b>	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The 1775 HP, 1150 HP, 1100 HP, and 515 HP reciprocating engines with integral compressors are not fired by diesel fuel. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart IIII.
<b>40 C.F.R. Part 60 Subpart JJJJ</b>	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The 1775 HP, 1150 HP, and 1100 HP are 4-stroke lean burn reciprocating engines with integral compressors that were constructed before June 12, 2006 and are fired by natural gas at an area source. The 515 HP (001-03) is a 4-stroke lean burn reciprocating engine with integral compressor at an area source that was manufactured on February 27, 2007 and installed on November 19, 2007. According to 40 C.F.R. § 63.6590 (a) (2) (iii), the 515 HP is a new stationary RICE under 40 C.F.R. Part 63 Subpart ZZZZ. 40 C.F.R. § 63.6590 (c) (1) states that a new stationary RICE located at an area source must meet the requirements of 40 C.F.R. Part 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. Part 60 Subpart JJJJ for spark ignition engines. Since the 515 HP was manufactured before the applicable dates for 40 C.F.R. Part 60 Subpart JJJJ specified in 40 C.F.R. § 60.4230 (a) (4) (i), the 515 HP does not have to meet any requirements of 40 C.F.R. Part 60 Subpart JJJJ or 40 C.F.R. Part 63 Subpart ZZZZ.
<b>40 C.F.R. Part 63 Subpart HHH</b>	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Bradley Compressor Station is not subject to Subpart HHH since the station is not a major source of HAPs.
<b>40 C.F.R. Part 63 Subpart ZZZZ</b>	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The 515 HP is a 4-stroke lean burn reciprocating engine with integral compressor at an area source of HAPs that was manufactured before the applicable dates in 40 C.F.R. § 60.4230 (a) (4) (i). The 515 HP does not have to meet any requirements of 40 C.F.R. Part 60 Subpart JJJJ or 40 C.F.R. Part 63 Subpart ZZZZ.
<b>40 C.F.R. Part 64</b>	This is the second permit renewal for this facility. During the first renewal, it was determined that CAM is not applicable to the engines and dehydration unit since they do not have add-on controls in accordance with 40 C.F.R § 64.2 (a). Therefore, a CAM determination is not required.

### **3.8. Emergency Operating Scenario**

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

- a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;
- b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;
- c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;
- d. Credible performance emission test data verifying the emission rates associated with the operation of the substitute engine shall be submitted to the Director within five (5) days;
- e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:
  - i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
  - ii. Identification of the engine(s) being temporarily replaced;
  - iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
  - iv. Projected duration of the replacement engine(s); and
  - v. The appropriate certification by a responsible official.

**[45CSR§30-12.7]**

**4.0 Reciprocating Internal Combustion Engines [emission unit ID(s): 001-03, 001-09, 001-0B, 001-0C; emission point ID(s): 006, 009, 012, 013]**

**4.1. Limitations and Standards**

4.1.1. The emissions from the Caterpillar G3516LE 1150 horsepower lean burn natural gas fired engine (Emission Point ID 012) shall not exceed the following:

Pollutant		Maximum Emission Rate	
		LB/hr	TPY
CO		3.80	16.70
NO <sub>x</sub>		4.56	20.00
PM <sub>10</sub>		0.09	0.37
SO <sub>2</sub>		0.01	0.02
VOCs		1.01	4.44
HAPs	Benzene	Negligible	0.02
	Formaldehyde	0.45	1.97

[45CSR13, R13-2127, 4.1.6 (001-0B)]

4.1.2. The Caterpillar G3516LE 1150 horsepower lean burn natural gas fired engine shall not consume more than 346,800 cubic feet of natural gas per hour and 8.32 million cubic feet of natural gas per day.

[45CSR13, R13-2127, 4.1.7 (001-0B)]

4.1.3. The emissions from the White-Superior Model 8GT825 1100 horsepower lean burn natural gas fired engine (Emission Point ID 009) shall not exceed the following:

Pollutant		Maximum Emission Rate	
		LB/hr	TPY
CO		7.28	31.90
NO <sub>x</sub>		4.90	21.20
PM <sub>10</sub>		0.08	0.34
SO <sub>2</sub>		Negligible	0.02
VOCs		1.12	4.89
HAPs	Benzene	Negligible	0.02
	Formaldehyde	0.41	1.81

[45CSR13, R13-2127, 4.1.8 (001-09)]

4.1.4. The White-Superior Model 8GT825 1100 horsepower lean burn natural gas fired engine shall not consume more than 331,700 cubic feet of natural gas per hour and 7.96 million cubic feet of natural gas per day.

[45CSR13, R13-2127, 4.1.9 (001-09)]

4.1.5. The emission from the Caterpillar G3508TA 515 horsepower lean burn natural gas fired engine (Emission Point ID 006) shall not exceed the following:

Pollutant	Maximum Emission Rate	
	LB/hr	TPY
CO	2.04	8.45
NO <sub>x</sub>	2.27	9.94
PM <sub>10</sub>	0.04	0.16
SO <sub>2</sub>	negligible	0.01
VOCs	0.40	1.74
HAPs	Benzene	negligible
	Formaldehyde	0.20

**[45CSR13, R13-2127, 4.1.10 (001-03)]**

- 4.1.6. The Caterpillar G3508TA 515 horsepower lean burn natural gas fired engine shall not consume more than 36,200 cubic feet of natural gas per hour and 0.87 million cubic feet of natural gas per day.

**[45CSR13, R13-2127, 4.1.11 (001-03)]**

- 4.1.7. The emission from the Caterpillar 3606TA 1775 horsepower lean burn natural gas fired engine (Emission Point ID 013) shall not exceed the following:

Pollutant	Maximum Emission Rate	
	LB/hr	TPY
CO	9.78	42.80
NO <sub>x</sub>	2.74	12.00
PM <sub>10</sub>	0.12	0.51
SO <sub>2</sub>	0.01	0.03
VOCs	3.56	15.60
HAPs	Benzene	0.01
	Formaldehyde	0.62

**[45CSR13, R13-2127, 4.1.12 (001-0C)]**

- 4.1.8. The Caterpillar 3606TA 1,775 horsepower lean burn natural gas fired engine shall not consume more than 535,300 cubic feet of natural gas per hour and 12.85 million cubic feet of natural gas per day.

**[45CSR13, R13-2127, 4.1.13 (001-0C)]**

- 4.1.9. The Permittee shall comply with all applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines by October 19, 2013 for the 1775 HP, 1150 HP, and 1100 HP reciprocating engines with integral compressors.

**[40 C.F.R. § 63.6595 (a) (1) (001-09, 001-0B, 001-0C)]**

- 4.1.10. As stated in 40 C.F.R. § 63.6603, the permittee must comply with the following requirements from 40 C.F.R. 63, Subpart ZZZZ, Table 2d and the operating limitations in Table 2b for existing stationary RICE located at area sources of HAP emissions:

**Table 2d**

For each . . .	The permittee must meet the following requirements, except during periods of startup . . .
Non-emergency, non-black start 4SLB stationary RICE >500 HP	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O <sub>2</sub> ; or Reduce CO emissions by 93 percent or more.

**Table 2b**

For each . . .	You must meet the following operating limitation . . .
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; or 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

**[40 C.F.R. § 63.6603 (a), and Tables 2d and 2b (001-09, 001-0B, 001-0C)]**

4.1.11. The permittee shall comply with the following requirements:

- a. The permittee must be in compliance with the emission limitations and operating limitations in 40 C.F.R. Part 63 Subpart ZZZZ that apply to the permittee at all times.
- b. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if required levels have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**[40 C.F.R. § 63.6605 (001-09, 001-0B, 001-0C)]**

- 4.1.12. a. You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ.
- b. During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.
- c. You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. § 63.6645.

**Table 5**

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
4. . . existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in 40 C.F.R. § 63.6625 (b); and  iii. You have recorded the approved operating parameters (if any) during the initial performance test.

**[40 C.F.R. § 63.6630, Table 5 (001-09, 001-0B, 001-0C)]**

- 4.1.13. a. If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- b. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- c. You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

**[40 C.F.R. § 63.6635 (001-09, 001-0B, 001-0C)]**

- 4.1.14. The permittee shall demonstrate continuous compliance by doing the following:
  - a. The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 C.F.R. 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 to 40 C.F.R. 63 Subpart ZZZZ.
  - b. The permittee must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 C.F.R. 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 C.F.R. 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 C.F.R. § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

- c. The permittee must also report each instance in which the applicable requirements in Table 8 of 40 C.F.R. 63 Subpart ZZZZ were not met.

**Table 6**

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
11. . .existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the approved operating parameter (if any) data according to 40 C.F.R. § 63.6625 (b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[40 C.F.R. §§ 63.6640 (a), (b), and (e) and Table 6 (001-09, 001-0B, 001-0C)]

- 4.1.15. The permittee shall comply with all General Provisions which apply according to Table 8 of 40 C.F.R. Part 63 Subpart ZZZZ.

[40 C.F.R. § 63.6665 (001-09, 001-0B, 001-0C)]

**4.2. Monitoring Requirements**

- 4.2.1. This facility is subject to the following requirements:

- a. If you elect to install a CEMS as specified in Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO<sub>2</sub> at both the inlet and the outlet of the control device according to the requirements in 40 C.F.R. §§ 63.6625 (a) (1) through (4).
1. Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 C.F.R. Part 60 Appendix B.
  2. You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in 40 C.F.R. § 63.8 and according to the applicable performance specifications of 40 C.F.R. Part 60 Appendix B as well as daily and periodic data quality checks in accordance with 40 C.F.R. Part 60 Appendix F, procedure 1.

3. As specified in 40 C.F.R. § 63.8 (c) (4) (ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.
  4. The CEMS data must be reduced as specified in 40 C.F.R. § 63.8 (g) (2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.
- b. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ, you must install, operate, and maintain each CPMS according to the requirements in 40 C.F.R. §§ 63.6625 (b) (1) through (8). For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in 40 C.F.R. § 63.6625 (b) are applicable September 6, 2011.
1. You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 C.F.R. §§ 63.6625 (b) (1) (i) through (v) and in 40 C.F.R. § 63.8 (d). As specified in 40 C.F.R. § 63.8 (f) (4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 C.F.R. §§ 63.6625 (b) (1) through (5) in your site-specific monitoring plan.
    - i. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
    - ii. Sampling interface ( *e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
    - iii. Equipment performance evaluations, system accuracy audits, or other audit procedures;
    - iv. Ongoing operation and maintenance procedures in accordance with provisions in 40 C.F.R. §§ 63.8 (c) (1) and (c) (3); and
    - v. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 C.F.R. §§ 63.10 (c), (e) (1), and (e) (2) (i).
  2. You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
  3. The CPMS must collect data at least once every 15 minutes (see also 40 C.F.R. § 63.6635).
  4. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
  5. You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
  6. You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

- c. If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to 40 C.F.R. 63 Subpart ZZZZ apply.
- d. If you have an operating limitation that requires the use of a temperature measurement device, you must meet the requirements in 40 C.F.R. §§ 63.6625 (k) (1) through (4).
  1. Locate the temperature sensor and other necessary equipment in a position that provides a representative temperature.
  2. Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a noncryogenic temperature range.
  3. Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range.
  4. Conduct a temperature measurement device calibration check at least every 3 months.

**[40 C.F.R. §§ 63.6625 (a), (b), (h), (k) (001-09, 001-0B, 001-0C)]**

### **4.3. Testing Requirements**

- 4.3.1. If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of 40 C.F.R. § 63.6612.
  - a. You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to 40 C.F.R. Part 63 Subpart ZZZZ that apply to you within 180 days after the compliance date that is specified for your stationary RICE in 40 C.F.R. § 63.6595 and according to the provisions in 40 C.F.R. § 63.7 (a) (2).
  - b. An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in 40 C.F.R. §§ 63.6612 (b) (1) through (4).
    1. The test must have been conducted using the same methods specified in 40 C.F.R. Part 63 Subpart ZZZZ, and these methods must have been followed correctly.
    2. The test must not be older than 2 years.
    3. The test must be reviewed and accepted by the Administrator.
    4. Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

**Table 4**

For each	Complying with the requirement to	You must . . .	Using . . .	According to the following requirements .
1. 2SLB, 4SLB, and CI stationary RICE	a. Reduce CO emissions	i. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Portable CO and O <sub>2</sub> analyzer	(a) Using ASTM D6522–00 (2005) <sup>a</sup> (incorporated by reference, see 40 C.F.R. § 63.14). Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O <sub>2</sub> analyzer	(a) Using ASTM D6522–00 (2005) <sup>ab</sup> (incorporated by reference, see 40 C.F.R. § 63.14) or Method 10 of 40 C.F.R. Part 60 Appendix A. The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	1. Method 1 or 1A of 40 C.F.R. Part 60 Appendix A, 40 C.F.R. § 63.7 (d) (1) (i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	1. Method 3 or 3A or 3B of 40 C.F.R. Part 60 Appendix A, or ASTM Method D6522–00 (2005)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	1. Method 4 of 40 C.F.R. Part 60 Appendix A, or Test Method 320 of 40 C.F.R. Part 63 Appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	1. Method 320 or 323 of 40 C.F.R. Part 63 Appendix A; or ASTM D6348–03, <sup>c</sup> provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE	1. Method 10 of 40 C.F.R. Part 60 Appendix A, ASTM Method D6522–00 (2005), <sup>a</sup> Method 320 of 40 C.F.R. Part 63 Appendix A, or ASTM D6348–03	(a) CO Concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

<sup>a</sup> You may also use Methods 3A and 10 as options to ASTM–D6522–00 (2005). You may obtain a copy of ASTM–D6522–00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM–D6522–00 (2005) may be used to test both CI and SI stationary RICE.

- b You may also use Method 320 of 40 C.F.R. Part 63 Appendix A, or ASTM D6348–03.
- c You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

**[40 C.F.R. § 63.6612 and Table 4 (001-09, 001-0B, 001-0C)]**

- 4.3.2. If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of 40 C.F.R. Part 63 Subpart ZZZZ.

**Table 3**

For each . . .	Complying with the requirement to . . .	You must . . .
4. . . existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hrs. or 3 years, whichever comes first.

**[40 C.F.R. § 63.6615 and Table 3 (001-09, 001-0B, 001-0C)]**

- 4.3.3. a. You must conduct each performance test in Tables 3 and 4 of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.
- b. Each performance test must be conducted according to the requirements that 40 C.F.R. Part 63 Subpart ZZZZ specifies in Table 4. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.
- c. [Reserved]
- d. You must conduct three separate test runs for each performance test required in this section, as specified in 40 C.F.R. § 63.7 (e) (3). Each test run must last at least 1 hour.
- e. 1. You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$[(C_i - C_o) / C_i] \times 100 = R \quad (Eq. 1)$$

Where:

- C<sub>i</sub> = concentration of CO or formaldehyde at the control device inlet,
- C<sub>o</sub> = concentration of CO or formaldehyde at the control device outlet, and
- R = percent reduction of CO or formaldehyde emissions.

2. You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in 40 C.F.R. §§ 63.6620 (e) (2) (i) through (iii).

i. Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = ( 0.209 F_d / F_c ) \quad (Eq. 2)$$

Where:

- F<sub>o</sub> = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.
- 0.209 = Fraction of air that is oxygen, percent/100.
- F<sub>d</sub> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).
- F<sub>c</sub> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).

ii. Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{CO_2} = [ 5.9 / F_o ] \quad (Eq. 3)$$

Where:

- X<sub>CO<sub>2</sub></sub> = CO<sub>2</sub> correction factor, percent.
- 5.9 = 20.9 percent O<sub>2</sub> – 15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent.

iii. Calculate the NO<sub>x</sub> and SO<sub>2</sub> gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = [ C_d ( X_{CO_2} / \%CO_2 ) ] \quad (Eq. 4)$$

Where:

- %CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.

f. If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

- g. If you petition the Administrator for approval of operating limitations, your petition must include the information described in 40 C.F.R. §§ 63.6620 (g) (1) through (5).
  - 1. Identification of the specific parameters you propose to use as operating limitations;
  - 2. A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;
  - 3. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
  - 4. A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
  - 5. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
  
- h. If you petition the Administrator for approval of no operating limitations, your petition must include the information described in 40 C.F.R. §§ 63.6620 (h) (1) through (7).
  - 1. Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;
  - 2. A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
  - 3. For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;
  - 4. For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;
  - 5. For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;
  - 6. For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
  - 7. A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

- i. The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

**[40 C.F.R. § 63.6620 (001-09, 001-0B, 001-0C)]**

- 4.3.4. a. You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of 40 C.F.R. Part 63 Subpart ZZZZ.
- b. During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.
- c. You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. § 63.6645.

**[40 C.F.R. § 63.6630 and Table 5 (001-09, 001-0B, 001-0C)]**

#### **4.4. Recordkeeping Requirements**

- 4.4.1. If the permittee must comply with the emission and operating limitations, the permittee must keep the following records:
  - a. A copy of each notification and report submitted to comply with 40 C.F.R. Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 C.F.R. § 63.10 (b) (2) (xiv).
  - b. Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.
  - c. Records of performance tests and performance evaluations as required in 40 C.F.R. § 63.10 (b) (2) (viii).
  - d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.6605 (b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

**[40 C.F.R. § 63.6655 (a) (001-09, 001-0B, 001-0C)]**

- 4.4.2. For each CEMS or CPMS, you must keep the records listed in 40 C.F.R. §§ 63.6655 (b) (1) through (3).
1. Records described in 40 C.F.R. § 63.10 (b) (2) (vi) through (xi).
  2. Previous ( *i.e.*, superseded) versions of the performance evaluation plan as required in 40 C.F.R. § 63.8 (d) (3).
  3. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 C.F.R. § 63.8 (f) (6) (i), if applicable.

**[40 C.F.R. § 63.6655 (b) (001-09, 001-0B, 001-0C)]**

- 4.4.3. The permittee shall keep the records required in Table 6 of 40 C.F.R. Part 63 Subpart ZZZZ to show compliance with each emission or operating limitation that applies.  
**[40 C.F.R. § 63.6655 (d) (001-09, 001-0B, 001-0C)]**

#### **4.5. Reporting Requirements**

- 4.5.1. You must submit all of the notifications in 40 C.F.R. §§ 63.7 (b) and (c), 63.8 (e), (f) (4) and (f) (6), 63.9 (b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

An existing stationary RICE located at an area source of HAP emissions.

**[40 C.F.R. § 63.6645 (a) (2) (001-09, 001-0B, 001-0C)]**

- 4.5.2. If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 C.F.R. § 63.7 (b) (1).

**[40 C.F.R. § 63.6645 (g) (001-09, 001-0B, 001-0C)]**

- 4.5.3. If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to 40 C.F.R. Part 63 Subpart ZZZZ, you must submit a Notification of Compliance Status according to 40 C.F.R. § 63.9 (h) (2) (ii).

1. For each initial compliance demonstration required in Table 5 to 40 C.F.R. Part 63 Subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

2. For each initial compliance demonstration required in Table 5 to 40 C.F.R. Part 63 Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to 40 C.F.R. Part 63 Subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 C.F.R. § 63.10 (d) (2)

**[40 C.F.R. § 63.6645 (h) (001-09, 001-0B, 001-0C)]**

- 4.5.4. You must submit each report in Table 7 of 40 C.F.R. Part 63 Subpart ZZZZ that applies to you.

**[40 C.F.R. § 63.6650 (a) (001-09, 001-0B, 001-0C)]**

- 4.5.5. Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. § 63.10 (a), you must submit each report by the date in Table 7 of 40 C.F.R. Part 63 Subpart ZZZZ and according to the requirements in 40 C.F.R. §§ 63.6650 (b) (1) through (b) (9).
1. For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 C.F.R. § 63.6595.
  2. For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595.
  3. For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
  4. For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
  5. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6 (a) (3) (iii) (A) or 40 CFR 71.6 (a) (3) (iii) (A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 C.F.R. §§ 63.6650 (b) (1) through (b) (4).
  6. For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595 and ending on December 31.
  7. For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in 40 C.F.R. § 63.6595.
  8. For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
  9. For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

**[40 C.F.R. § 63.6650 (b) (001-09, 001-0B, 001-0C)]**

- 4.5.6. The Compliance report must contain the information in 40 C.F.R. §§ 63.6650 (c) (1) through (6).
1. Company name and address.
  2. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
  3. Date of report and beginning and ending dates of the reporting period.

4. If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 C.F.R. § 63.6605 (b), including actions taken to correct a malfunction.
5. If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
6. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 C.F.R. § 63.8 (c) (7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

**[40 C.F.R. § 63.6650 (c) (001-09, 001-0B, 001-0C)]**

- 4.5.7. For each deviation from an emission or operating limitation that occurs for a stationary RICE not using a CMS to comply with the emission or operating limitations in 40 C.F.R. 63, Subpart ZZZZ, the Compliance report must contain the information specified in 40 C.F.R. §§ 63.6650 (c) (1) through (4) in addition to the following information:
  - a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
  - b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

**[40 C.F.R. § 63.6650 (d) (001-09, 001-0B, 001-0C)]**

- 4.5.8. For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in 40 C.F.R. §§ 63.6650 (c) (1) through (4) and (e) (1) through (12).
  1. The date and time that each malfunction started and stopped.
  2. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
  3. The date, time, and duration that each CMS was out-of-control, including the information in 40 C.F.R. § 63.8 (c) (8).
  4. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
  5. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
  6. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

7. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
8. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
9. A brief description of the stationary RICE.
10. A brief description of the CMS.
11. The date of the latest CMS certification or audit.
12. A description of any changes in CMS, processes, or controls since the last reporting period.

**[40 C.F.R. § 63.6650 (e) (001-09, 001-0B, 001-0C)]**

- 4.5.9. Each affected source that has obtained a title V operating permit pursuant to 40 C.F.R. Part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 C.F.R. § 70.6 (a) (3) (iii) (A) or 40 C.F.R. § 71.6 (a) (3) (iii) (A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 C.F.R. § 70.6 (a) (3) (iii) (A) or 40 C.F.R. § 71.6 (a) (3) (iii) (A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

**[40 C.F.R. § 63.6650 (f) (001-09, 001-0B, 001-0C)]**

#### **4.6. Compliance Plan**

- 4.6.1. None

**5.0 Dehydration Reboiler and Dehydration Still Vent [emission unit ID(s): 001-04 and 001-0A; emission point ID(s):010 and 011]**

**5.1. Limitations and Standards**

5.1.1. The emission from the Dehydrator Reboiler (Emission Point ID 010) shall not exceed the following:

Pollutant	Maximum Emission Rate	
	LB/hr	TPY
CO	0.17	0.74
NO <sub>x</sub>	0.20	0.88
PM <sub>10</sub>	0.02	0.07
SO <sub>2</sub>	negligible	0.01
VOCs	0.01	0.05

[45CSR13, R13-2127, 4.1.14 (001-04)]

5.1.2. The Dehydrator Reboiler shall not consume more than 2,000 cubic feet of natural gas per hour and 17.5 million cubic feet of natural gas per year. Compliance with the annual limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of natural gas consumed at any given time for the previous twelve (12) months.

[45CSR13, R13-2127, 4.1.15 (001-04)]

5.1.3. The emission from the Dehydrator Still Vent (Emission Point ID 011) shall not exceed the following:

Pollutant	Maximum Emission Rate		
	LB/hr	TPY	
VOCs	1.42	6.23	
HAPs	Benzene	0.16	0.68
	Ethylbenzene	0.03	0.76
	Toluene	0.26	1.13
	Xylenes	0.59	2.56

[45CSR13, R13-2127, 4.1.16 (001-0A)]

5.1.4. The Glycol Dehydrator (001-0A) shall not exceed a dry natural gas production rate of 1.25 million cubic feet of natural gas per hour and 30.00 million cubic feet of natural gas per day.

[45CSR13, R13-2127, 4.1.17]

5.1.5. 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., 45CSR13, R13-2127, 4.1.1 (001-04)]

- 5.1.6. Compliance with the visible emission requirements of Section 5.1.5 shall be determined in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 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 5.1.5.

**[45CSR§2-3.2., 45CSR13, R13-2127 4.1.2 (001-04)]**

5.1.7. **40 CFR 63, Subpart HH - <1 Ton of Benzene Exemption**

**40 C.F.R. § 63.764 (e)**

(e) *Exemptions.*

- (1) The owner or operator is exempt from the requirements of 40 C.F.R. §§ 63.764 (c) (1) and (d) if the criteria listed in 40 C.F.R. § 63.764 (e) (1) (ii) are met, except that the records of the determination of these criteria must be maintained as required in 40 C.F.R. § 63.774 (d) (1).
- (ii) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in 40 C.F.R. § 63.772 (b) (2).

**40 C.F.R. § 63.772 (b)**

- (2) The determination of actual average benzene emissions from a glycol dehydration unit shall be made using the procedures of either 40 C.F.R. § 63.772 (b) (2) (i) or (b) (2) (ii). Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.
  - (i) The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ 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” (GRI-95/0368.1); or
  - (ii) The owner or operator shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods in 40 C.F.R. § 63.772 (a) (1) (i) or (ii), or an alternative method according to 40 C.F.R. § 63.7 (f). 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.

**40 C.F.R. § 63.774 (d) (1)**

- (d) (1) An owner or operator of a glycol dehydration unit that meets the exemption criteria in 40 C.F.R. § 63.764 (e) (1) (ii) shall maintain the records specified in 40 C.F.R. § 63.764 (d) (1) (ii) for that glycol dehydration unit.
- (ii) The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with 40 C.F.R. § 63.772 (b) (2).

**[40 C.F.R. 63 Subpart HH]**

- 5.1.8. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations.

Note: Sources that combust:

1. pipeline quality natural gas or
2. field gas with a maximum sulfur content of 20 grains of sulfur per 100 standard cubic feet shall be deemed in compliance with this requirement.

**[45CSR§10-4.1., 45CSR13, R13-2127, 4.1.3 (001-0A)]**

- 5.1.9. No person shall cause, suffer, allow or permit the combustion of any refinery process gas stream or any other process gas stream that contains hydrogen sulfide in a concentration greater than 50 grains per 100 cubic feet of gas except in the case of a person operating in compliance with an emission control and mitigation plan approved by the Director and U. S. EPA.

Note: Sources that combust:

1. pipeline quality natural gas or
2. field gas with a maximum H<sub>2</sub>S content of 0.25 grains per 100 cubic feet of gas shall be deemed in compliance with this requirement.

**[45CSR§10-5.1., 45CSR13, R13-2127, 4.1.4 (001-0A)]**

**5.2. Monitoring Requirements**

- 5.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations using Method 22 for the purpose of demonstrating compliance with Section 5.1.5. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours. Records of observation will be kept for at least 5 years from the date of observation.

**[45CSR13; R13-2127, 4.2.1 (001-04)]**

- 5.2.2. To show compliance with Section 5.1.8, the owner or operator may elect not to monitor the total sulfur content of the fuel combusted, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. § 60.331 (u). The owner or operator shall use one of the following sources of information to make the required demonstration:

The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, representative fuel data specified in either Section 2.3.1.4 or 2.3.2.4 Appendix D to 40 C.F.R.75 is required.

**[45CSR§30-5.1.c. (001-0A)]**

- 5.2.3. In order to demonstrate compliance with Section 5.1.3 and the 0.90 megagram per year benzene exemption (40 C.F.R. § 63.764 (e) (1) (ii)) provided under 5.1.7, the permittee shall use GRI-GlyCalc Version 3.0 or higher to estimate emissions from the glycol dehydration still vent (Pretrofab). The glycol dehydration system must be accurately defined by monitoring and recording actual operating parameters associated with the emission unit. The following parameters shall be measured periodically in order to define annual average values, or if monitoring is not practical some parameters may be assigned default values as listed below. For the purposes of this condition, the term *periodically* shall be interpreted as sufficient enough to reflect annual variation and therefore, this term is an operating parameter and site dependant.

With the exception of wet gas composition, which shall be measured in accordance with Condition 5.3.1, the permittee shall monitor and record bi-monthly the actual operating parameters listed below. These are required to be measured or assumed to equal the default values listed below in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GRI-GLYCalc emission modeling method:

- Natural Gas Flowrate:
  - ❖ number of days operated per year,
  - ❖ annual daily average (MMscf/day), and
  - ❖ maximum design capacity (MMscf/day)
- Absorber temperature and pressure
- Lean glycol circulation rate
- Glycol pump type
- Flash tank temperature and pressure, if applicable
- Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber – dehydration column) Sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V4.
- Wet gas water content shall be measured with a dew point meter at a location prior to the contactor column, but after the last liquid knock out pot.
- Dry gas water content shall be measured with a dew point meter at a location after the contactor column.

The following operating parameter(s) may be assigned default values when using GRI-GLYCalc:

- Dry Gas water content at a point directly after exiting the dehydration column and before any additional separation points or assume pipeline quality at 7 lb H<sub>2</sub>O / MMscf.

- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI.
- Lean glycol circulation rate may be estimated using the recirculation ratio of 3 gal TEG / lb H<sub>2</sub>O removed.

**[45CSR§30-5.1.c. (001-0A)]**

- 5.2.4. The permittee shall monitor the amount of dry natural gas production on a daily, monthly, and yearly basis. In addition, the permittee shall monitor the temperature, pressure, and glycol throughput of the dehydration unit on a daily basis.

**[45CSR13, R13-2127, 4.2.3. (001-0A)]**

### **5.3. Testing Requirements**

- 5.3.1. Within the 3<sup>rd</sup> year of this permit term, the permittee shall determine the composition of the wet natural gas by sampling in accordance with requirement 5.2.3. As specified in the GRI-GlyCalc V4 Technical Reference user Manual and Handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.

**[45CSR§30-5.1.c. (001-0A)]**

### **5.4. Recordkeeping Requirements**

- 5.4.1. The permittee shall maintain records of the dry natural gas production rate for the glycol dehydration unit. The permittee shall also maintain daily records of the temperature, pressure, and glycol throughput of the dehydration unit. Records of malfunctions shall include: equipment involved, cause of malfunction, corrective steps as taken, duration, estimated change in emissions, steps taken to prevent reoccurrences. Said records shall be maintained on site for a period of five (5) years. Said records shall be made available to the Director of the Division of Air Quality of his/her duly authorized representative upon request and shall be certified by a responsible official upon the submittal.

**[45CSR13, R13-2127, 4.4.3. (001-0A)]**

- 5.4.2. For the purpose of documenting compliance with the emission limitations in 5.1.3, as well as the 1 ton per year benzene exemption per 5.1.7, the permittee shall maintain records of all monitoring data, wet gas sampling, and annual GLYCalc emission estimates.

**[45CSR§30-5.1.c (001-0A)]**

## **5.5. Reporting Requirements**

5.5.1. The permittee shall submit by March 31<sup>st</sup> of the following year, an emission summary for the still dehydration unit, which incorporates the wet gas testing results, required by 5.3.1. The permittee shall also supply a copy of the most recent report within the facility's subsequent Title V renewal application. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 5.2.3. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall also incorporate a copy of the lab analysis obtained from the wet gas testing as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point, which is referenced within 40 C.F.R Part 63 Subpart HH as the point where the gas enters into a natural gas transmission and/or storage pipeline. This report shall be signed by a responsible official upon submittal.

**[45CSR§30-5.1.c. (001-0A)]**

## **5.6. Compliance Plan**

5.6.1. None