

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:
Dominion Transmission, Inc.
Yellow Creek Station
R30-01300001-2011

John A. Benedict
Director

Issued: July 13, 2011 • Effective: July 27, 2011
Expiration: July 13, 2016 • Renewal Application Due: January 13, 2016

Permit Number: **R30-01300001-2011**
Permittee: **Dominion Transmission, Inc.**
Facility Name: **Yellow Creek Station**
Permittee Mailing Address: **445 West Main Street, Clarksburg, WV 26301**

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.

Facility Location:	Big Springs, Calhoun County, West Virginia
Facility Mailing Address:	H.C. 71, Box 8 Big Springs, WV 26137
Telephone Number:	(304) 354-7718
Type of Business Entity:	Corporation
Facility Description:	Natural gas transmission facility
SIC Codes:	4922 Primary; NA Secondary; NA Tertiary
UTM Coordinates:	495.80 km Easting • 4314.80 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.

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.

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Attachment: G60-C034, G60-C

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
EN01	EN01	Reciprocating Engine/Integral Compressor; Cooper GMV-10TF	1977	1100 HP	N/A
EN02	EN02	Reciprocating Engine/Integral Compressor; Ingersoll Rand 103KVG-HL	1977	1100 HP	N/A
EN03	EN03	Reciprocating Engine/Integral Compressor; Ingersoll Rand 103KVG-HL	1977	1100 HP	N/A
<u>EG01</u>	<u>EG01</u>	<u>Emergency Generator, Cummins GM 8.1L, 4SRB, SI</u>	<u>2011</u>	<u>192.5 HP</u>	<u>C1 (catalyst)</u>
<u>EG02</u>	<u>EG02</u>	<u>Emergency Generator, Cummins GM 8.1L, 4SRB, SI</u>	<u>2011</u>	<u>192.5 HP</u>	<u>C2 (catalyst)</u>
DEHY01	DEHY01	Glycol Dehydration Unit Still Column	1978	20 mmscf/day	Flare (DEHY)
CPR01	CPR01	Air Compressor; Kohler K341S	1991	16 HP	N/A
RBR01	RBR01	Glycol Dehydration Unit Reboiler	1978	2.0 MMBtu/hr	N/A
DEHY (1C)	DEHY	Glycol Dehydration Unit Flare	1978	95% destruction efficiency	N/A
TK01	TK01	Horizontal Aboveground Storage Tank – Tri-Ethylene Glycol	1978	4,200-gallon	N/A
TK02	TK02	Horizontal Aboveground Storage Tank – Produced Fluids	1978	4,200-gallon	N/A
TK03	TK03	Horizontal Aboveground Storage Tank – Methanol	1978	2,000-gallon	N/A
TK04	TK04	Vertical Aboveground Storage Tank – Ethylene Glycol	1991	4,200-gallon	N/A
TK05	TK05	Vertical Aboveground Storage Tank – Methanol	1991	2,000-gallon	N/A
TK06	TK06	Vertical Aboveground Storage Tank – Engine Oil	1991	4,200-gallon	N/A
TK07	TK07	Vertical Aboveground Storage Tank – Engine Oil	1991	4,200-gallon	N/A
TK08	TK06	Vertical Aboveground Storage Tank – Waste Oil	1991	4,200-gallon	N/A
TK09	TK09	Vertical Aboveground Storage Tank – Wastewater	2001	500-gallon	N/A

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
R13-2614A	June 27, 2006
G60-C034	June 27, 2011

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

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	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. ~~Reserved When emissions on an annual basis of one or more of the greenhouse gases listed below are greater than the *de minimis* amounts listed below, all greenhouse gases emitted above the *de minimis* amounts shall be reported to the Secretary under 45CSR§42-4. (see Section 3.5.10.):~~

Greenhouse Gas Compound	tons/year
carbon dioxide	10,000
methane	476
nitrous oxide	32.6
hydrofluorocarbons	0.855
perfluorocarbons	1.09
sulfur hexafluoride	0.42

~~**[45CSR§42-3.1, State Enforceable only.]**~~

- 3.1.10. 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]

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

[45CSR13, R13-2614, 4.1.1.]

- 3.1.12. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the facility shall not exceed 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs. Compliance with Section 5.0 shall ensure that the facility is a minor HAP source.

[45CSR13, R13-2614, 4.1.3.]

- 3.1.13. 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 three 1100 HP reciprocating engines with integral compressors.

[40 C.F.R. § 63.6595 (a) (1) (EN01, EN02, EN03)]

- 3.1.14. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2614A, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-2614, 2.5.1.]

3.2. Monitoring Requirements

- 3.2.1. Reserved

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, 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. *Record of Maintenance of Air Pollution Control Equipment.* For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures specifically required in this permit.

[45CSR13, R13-2614, 4.2.2.]

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

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

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

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

[45CSR13, R13-2614, 4.2.3.]

- 3.4.6. **Minor Source of Hazardous Air Pollutants (HAP).** The permittee shall maintain records of annual HAP emissions using AP-42 emission factors, GRI-GLYCalc model outputs, manufacturer guaranteed values, sample and/or test data, or other methods approved by DAQ demonstrating that facility-wide emissions are less than those specified in Section 3.1.12.

[45CSR13, R13-2614, 4.2.4.]

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 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
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. 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.]

~~3.5.10. **Greenhouse Gas Reporting Requirements.** When applicable, as determined in permit section 3.1.9, greenhouse gas emissions shall be reported pursuant to 45CSR§42-4, including the following:~~

- ~~a. In accordance with a reporting cycle provided by the Secretary, affected sources shall report to the Secretary the quantity of all greenhouse gases emitted above *de minimis* amounts in the years specified by the Secretary.~~

~~**[45CSR§42-4.1., State Enforceable only.]**~~

- ~~b. Affected sources shall only be required to report annual quantities of anthropogenic non mobile source greenhouse gases emitted at the stationary source, and shall not be required to report biogenic emissions of greenhouse gases.~~

~~**[45CSR§42-4.2., State Enforceable only.]**~~

- ~~c. Reports of greenhouse gas emissions submitted to the Secretary under 45CSR§42-4, shall be signed by a responsible official and shall include the following certification statement: "I, the undersigned, hereby certify that the data transmitted to the West Virginia Department of Environmental Protection is true, accurate, and complete, based upon information and belief formed after reasonable inquiry."~~

~~**[45CSR§42-4.5., State Enforceable only.]**~~

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.

40 C.F.R. Part 60 Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The three (3) 1100 HP reciprocating engines with integral compressors were manufactured before July 11, 2005 and they are not fired by diesel. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart III.
40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The three (3) 1100 HP reciprocating engines with integral compressors were manufactured before July 12, 2006 and these units combust natural gas. Thus, these engines are not subject to 40 C.F.R. Part 60 Subpart JJJJ.
40 C.F.R. Part 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Yellow Creek Station is not subject to Subpart HHH since the station compresses production gas and is a minor (area) source of HAPs.
40 C.F.R. Part 64	This is the second permit renewal for this facility. The facility was found not to be subject to CAM at the time of the first renewal. 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 Dehydrator Reboiler [emission point ID(s): RBR01]

4.1 Limitations and Standards

- 4.1.1. 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]

4.2 Monitoring Requirements

- 4.2.1. Reserved

4.3 Testing Requirements

- 4.3.1. Reserved

4.4 Recordkeeping Requirements

- 4.4.1. Reserved

4.5 Reporting Requirements

- 4.5.1. Reserved

4.6 Compliance Plan

- 4.6.1. Reserved

5.0 Dehydration Unit Still and Dehydration Unit with Flare [emission point ID(s): DEHY01, DEHY, and DEHY 1C]

5.1. Limitations and Standards

- 5.1.1. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

$$\text{Emissions (lb/hr)} = F \times \text{Incinerator Capacity (tons/hr)}$$

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

Incinerator Capacity:	Factor F
A. Less than 15,000 lbs/hr	5.43
B. 15,000 lbs/hr or greater	2.72

Calculation for PM Emissions:

$$(5.43) \times (77.6 \text{ acf/min}) \times (60 \text{ min/hr}) \times (0.0447 \text{ lb/cf}) \times (\text{ton}/2000 \text{ lb}) = 0.5652 \text{ lb/hr}$$

[45CSR§6-4.1, 45CSR13, R13-2614, 5.1.4. (DEHY)]

- 5.1.2. Emission of Visible Particulate Matter -- No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater.
[45CSR§6-4.3, 45CSR13, R13-2614, 5.1.1. (DEHY)]
- 5.1.3. The provisions of Section 5.1.2 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR§6-4.4. (DEHY)]
- 5.1.4. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5., 45CSR13, R13-2614, 5.1.5. (DEHY)]
- 5.1.5. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6., 45CSR13, R13-2614, 5.1.6. (DEHY)]
- 5.1.6. 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, except as provided in 45CSR§10-4.1.a through 45CSR§10-4.1.e.
[45CSR§10-4.1., 45CSR13, R13-2614, 4.1.2.]
- 5.1.7. 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. In certain cases very small units may be considered exempt from this requirement if, in the opinion of the Director, compliance would be economically unreasonable and if the contribution of the unit to the surrounding air quality could be considered negligible.
[45CSR§10-5.1.]

- 5.1.8. The flare (1C) is a non-assisted flare and will be operated within operational design limits and with routine maintenance.
[45CSR13, R13-2614, 5.1.2. (DEHY 1C)]
- 5.1.9. The flare (1C) will be operated at all times when the glycol dehydration unit (DEHY01) is operational. The flare pilot flame will be monitored by thermocouple connected to the control room to detect the absence of a pilot flame. The flame will be reignited automatically when necessary. The dehydration unit will not be operated at times when a pilot flame is not present, except the time required to relight the pilot flame during outages.
[45CSR13, R13-2614, 5.1.3. (DEHY 1C)]
- 5.1.10. The permittee shall not exceed a wet natural gas throughput of 20 mmscf/day to the glycol dehydration unit/still column (DEHY01).
[45CSR13, R13-2614, 5.1.7. (DEHY01)]
- 5.1.11. Emissions to the atmosphere from emission point, DEHY01, shall not exceed the following limits:

Pollutant	Maximum Controlled Emission Rate	
	LB/hr	TPY
Nitrogen Oxides	0.07	0.31
Carbon Monoxide	0.39	1.70
Volatile Organic Compounds	0.86	3.75
Xylenes	0.21	0.92

[45CSR13, R13-2614, 5.1.8. (DEHY01)]

- 5.1.12. If the annual emissions for 2010 or any year thereafter reaches or exceeds 1 tpy of benzene for the dehydration unit, the permittee shall comply with the following:

Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in 40 C.F.R. § 63.761) shall comply with the following:

- a. Determine the optimum glycol circulation rate using the following equation:

$$L_{OPT} = 1.15 * 3.0 \frac{\text{gal TEG}}{\text{lb H}_2\text{O}} * \left(\frac{F * (I - O)}{24 \text{ hr/day}} \right)$$

Where:

- L_{OPT} = Optimal circulation rate, gal/hr.
- F = Gas flowrate (MMSCF/D).
- I = Inlet water content (lb/MMSCF).
- O = Outlet water content (lb/MMSCF).
- 3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H₂O).
- 1.15 = Adjustment factor included for a margin of safety.

- b. Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with 40 C.F.R. § 63.764 (d) (2) (i). If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with 40 C.F.R. § 63.764 (d) (2) (i), the owner or operator must calculate an alternate circulation rate using GRI-GLYCalc™, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with 40 C.F.R. § 63.775 (c) (7).
- c. Maintain a record of the determination specified in 40 C.F.R. § 63.764 (d) (2) (ii) in accordance with the requirements in 40 C.F.R. § 63.774 (f) and submit the Initial Notification in accordance with the requirements in 40 C.F.R. § 63.775 (c) (7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with 40 C.F.R. §§ 63.764 (d) (2) (i) or (ii) and submit the information specified under 40 C.F.R. § 63.775 (c) (7) (ii) through (v).

[40 C.F.R. §§ 63.764 (d) (2) and (e) (1) (ii)]

5.2. Monitoring Requirements

- 5.2.1. At a minimum of once per year, sample and analyze the inlet gas stream to the station utilizing gas chromatography for the presence of Sulfur. Proof of compliance with the 2000 ppm_v limit will be considered demonstrated if the gas chromatograph shows a total sulfur content of 4.751 grains/100ft³. Records shall be maintained on site or at a reasonably available location for a period of no less than five (5) years stating the date and time of analysis and the sulfur content of the gas sampled.
[45CSR§30-5.1.c. (DEHY)]
- 5.2.2. At a minimum of once per year, sample and analyze the inlet gas stream utilizing gas chromatography for the presence of H₂S. Proof of compliance with the 50 grains/100ft³ limit will be considered demonstrated if the gas chromatograph shows a total H₂S content of 0.3492 grains/100ft³. Records shall be maintained on site or at a reasonably available location stating the date of analysis and the hydrogen sulfide content of the gas sampled.
[45CSR§30-5.1.c. (DEHY)]
- 5.2.3. The flare pilot flame will be continuously monitored by a thermocouple connected to the control room to detect the absence of a pilot flame.
[45CSR13, R13-2614, 5.2.1. (DEHY)]
- 5.2.4. The permittee shall conduct visible emission checks and/or opacity monitoring for the flare (1C).

The visible emission checks shall determine the presence or absence of visible emissions. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60 Appendix A, Method 9 certification course.

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

If visible emissions are present at the flare (1C) for three (3) consecutive monthly checks, the permittee shall conduct an opacity reading at that source(s) using the procedures and requirements of Method 9 as soon as practicable, but within seventy-two (72) hours of the final visual emission check. A Method 9 observation at a source(s) restarts the count of the number of consecutive readings with the presence of visible emissions.

[45CSR13, R13-2614, 5.2.2. (DEHY and 1C)]

- 5.2.5. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a daily basis for DEHY01.

[45CSR13, R13-2614, 5.2.3. (DEHY01)]

- 5.2.6. The glycol dehydration unit (DEHY01) is required to monitor the following operating parameters. These parameters shall be measured to correspond with the testing and reporting requirements. The WV Division of Air Quality requires the following actual operating parameters be measured in order to satisfy this monitoring requirement with using the Gas Analysis and Process Data Method GLYCalc emission modeling method.

- Natural Gas Flowrate, annual, per day, and maximum capacity (Mmscf/day)
- Wet Gas or absorber temperature and pressure
- Lean glycol circulation rate

As an alternative to the compliance monitoring specified above, for the “Gas Analysis and Process Data,” calculation method utilized by the GLYCalc V4, the permittee may elect to incorporate monitoring sufficient to satisfy the following alternative calculation methods provided by GLYCalc V4: Gas Analysis and ARL Method (RL+Gas) or the GRI ARL Method (for TEG units only).

These alternative methods along with their associated monitoring inputs can be used to demonstrate compliance with Section 5.1.11, provided emissions are 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) as well as the methods and recommendations for sampling and analysis of the wet gas stream as presented in the GLYCalc Technical Reference User Manual and Handbook V4 when applicable.

[45CSR13, R13-2614, 5.2.4. (DEHY01)]

5.3. Testing Requirements

- 5.3.1. Potential HAP emissions from the glycol dehydration unit (DEHY01) shall not exceed 10 TPY of any single HAP or 25 TPY of any combination of HAPs. Compliance with this emission rate shall be determined by using GRI-GlyCalc Version 3.0 or higher, sampled in accordance with the Gas Processor Association GPA Methods 2166 and analyzed in accordance with Method 2286. Representative gas sample collection and analysis frequency for dehydration units shall be determined based on the level of HAP emissions from the glycol dehydration unit of the facility as set forth in the schedule provided in the table below. The minimum frequency stated in the table does not relieve the facility from the requirement to appropriately account for process or feed gas changes that could affect minor source status or prevent the facility from conducting more frequent sampling and analysis and producing a representative average composition. For purposes of determining potential HAP emissions at production-related facilities, the methods in 40 C.F.R. 63 Subpart HH shall be used unless HAPs are specifically limited by a federally enforceable permit condition. These determinations shall be documented in accordance with the applicability determination records required to be maintained by 40 C.F.R. § 63.10 (b) (3).

Wet Gas Sampling and Analysis Frequency for Dehydration Units Based on Permitted Emission Rates	
Permitted Emission Rate as a Percentage of Major Individual or Total HAPs Thresholds in TPY as determined by GRI-GlyCalc v. 3.0 or higher	Minimum Default Frequency
Every dehydration unit (regardless of permitted emission rate)	An initial compliance test within 180 days of permit issuance or within 180 days of start-up of the dehydration unit, whichever is later*
Up to 85%	After the initial compliance test, no further testing required except as ordered by the Director
85 to 95%	For units for which the permit application was based on test data from that unit, there shall be at least 3 additional tests within the first 5 years after the permit is issued. For units for which the application was not based on actual test data from that unit, there shall be at least 4 tests within the first five years. The initial compliance test will be accepted as the first such post-permit test. All post-permit tests shall be performed at least nine (9) months, and no more than fifteen (15) months, apart. After 5 years the permittee may petition the Director, in writing and with supporting data, for a reduction in frequency of, or elimination of, testing. The Director shall respond in writing within 60 days. The decision of the Director shall be final and shall not be subject to appeal.
95% or Above	Once Per Year

* This initial compliance test is only for each unit that receives a construction, modification, or class II administrative update permit that would result in an increase in the potential to emit for HAPs.

Note: The DAQ defines a representative wet gas sample to be one that is characteristic of the average gas composition dehydrated throughout a calendar year. If an isolated sample is not indicative of the annual average composition, then a company may opt to produce a weighted average based on throughput between multiple sampling events, which can be used to define a more representative average annual gas composition profile.

[45CSR13, R13-2614, 5.3.1. (DEHY01)]

5.4. Recordkeeping Requirements

5.4.1. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system (DEHY01) to demonstrate compliance with Section 5.1.10. Said records shall be maintained on site. 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, R13-2614, 5.4.1. (DEHY01)]

- 5.4.2. For the purpose of demonstrating compliance with Section 5.1.9, the permittee shall maintain a continuous record of the times and duration of all periods during which the pilot flame was absent. Said records shall be maintained on site. 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, R13-2614, 5.4.2. (DEHY)]
- 5.4.3. For the purpose of demonstrating compliance with Section 5.1.8, the permittee shall maintain a record of the flare design (i.e. steam assisted, air assisted, or nonassisted). Said records shall be maintained on site. 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, R13-2614, 5.4.3. (DEHY)]
- 5.4.4. For the purpose of demonstrating compliance with Sections 5.1.2 and 5.1.4, the permittee shall maintain records of all monitoring data documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the normal monthly evaluation, the record of observation may note “out of service” (O/S) or equivalent.
[45CSR13, R13-2614, 5.4.4. (DEHY)]
- 5.4.5. For the purpose of demonstrating compliance with the limits set forth in Section 5.3.1, the permittee shall maintain records of the initial heat content determinations, flow rate measurements, exit velocity determinations and wet gas analysis made (if required) during subsequent compliance determinations. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, R13-2614, 5.4.5. (DEHY01)]

5.5. Reporting Requirements

- 5.5.1. Any violation(s) of the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. Part 60 Appendix A, Method 9 must be reported in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-2614, 5.5.1.]
- 5.5.2. The permittee shall submit the test report required by Section 5.3.1 within 60 days of conducting the sampling of the wet gas stream as required. This report shall include a potential to emit (PTE) estimate using GRI-GlyCalc Version 3.0 or higher, incorporating the specific parameters measured as referenced in Section 5.2.6. The emission estimate shall also incorporate the lab data obtained from the wet gas analysis as well as a description of how and where the sample was taken.
[45CSR13, R13-2614, 5.5.2. (DEHY01)]

- 5.5.3. The permittee shall submit the test report required by Section 5.3.1 within 60 days of completing the sampling of the waste gas. This report shall provide a summary that demonstrates Section 5.3.1 is being adhered to as well as a direct comparison of these limitations with the measured values.
[45CSR13, R13-2614, 5.5.3. (DEHY01)]

5.6. Compliance Plan

- 5.6.1. None

6.0. Reciprocating Internal Combustion Engines and Air Compressor (EN01, EN02, EN03, CPR01)

6.1. Limitations and Standards

6.1.1. 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 three 1100 HP reciprocating engines with integral compressors.

[40 C.F.R. § 63.6595 (a) (1), (EN01, EN02, EN03)]

6.1.2. 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 for existing stationary RICE located at area sources of HAP emissions:

For each . . .	The permittee must meet the following requirements, except during periods of startup..
Non-emergency, non-black start 2SLB stationary RICE (EN01)	Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹
	Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first; and
	Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.
Non-emergency, non-black start 4SRB stationary RICE >500 HP (EN02, EN03)	Limit concentration of formaldehyde in the stationary RICE exhaust to 2.7 ppmvd at 15 percent O ₂ or
	Reduce formaldehyde emissions by 76 percent or more
Non-emergency, non-black start 4SRB stationary RICE ≤500 HP (CPR01)	Change oil and filter every 1,440 hours of operation or annually, whichever comes first; ¹
	Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and
	Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

¹Sources have the option to utilize an oil analysis program as described in 40 C.F.R. § 63.6625 (i) in order to extend the specified oil change requirement in Table 2d of 40 C.F.R. Part 63 Subpart ZZZZ.

[40 C.F.R. § 63.6603(a), and Table 2d]

6.1.2. The permittee shall comply with the following requirements:

- a. The permittee must be in compliance with the emission limitations and operating limitations in this subpart 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]

- 6.1.3. (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, Table 5 (EN02, EN03)]

- 6.1.4. (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, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.
- (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 (EN02, EN03)]

- 6.1.5. 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 Table 2d of 40 C.F.R. 63 Subpart ZZZZ that apply to the permittee according to methods specified in Table 6 of 40 C.F.R. 63 Subpart ZZZZ.
- Table 6 states that for work or management practices, the permittee shall operate and maintain the stationary RICE according to the manufacturer's emission related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- b. The permittee must report each instance in which you did not meet each emission limitation or operating limitation in and Table 2d of 40 C.F.R. 63 Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in 40 C.F.R. § 63.6650.
- 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.

[40 C.F.R. §§ 63.6640 (a), (b), and (e)]

- 6.1.6. 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]

6.2. Emission Standards for Owners and Operators

6.2.1. 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 CO₂ 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 CO₂ concentration.

[40 C.F.R. § 63.6625 (a) (EN02, EN03)]

- 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).
- (1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.
 - (2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit 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.
 - (3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 15-minute period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.
 - (4) Determine the 3-hour block average of all recorded readings, except as provided in 40 C.F.R. § 63.6625 (b) (3).

- (5) Record the results of each inspection, calibration, and validation check.
- (6) You must develop a site-specific monitoring plan that addresses 40 C.F.R. §§ 63.6625 (b) (6) (i) through (vi).
 - (i) Installation of the CPMS sampling probe or other interface at the appropriate location to obtain representative measurements;
 - (ii) Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems;
 - (iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations);
 - (iv) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 C.F.R. §§ 63.8 (c) (1), (c) (3), and (c) (4) (ii);
 - (v) Ongoing data quality assurance procedures in accordance with the general requirements of 40 C.F.R. § 63.8 (d); and
 - (vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 C.F.R. §§ 63.10 (c), (e) (1), and (e) (2) (i).
- (7) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.
- (8) You must operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan.

[40 C.F.R. § 63.6625 (b) (EN02, EN03)]

- c. You must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
 - (1) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;
 - (2) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an a area source of HAP emissions;

[40 C.F.R. § 63.6625 (e) (5) and (e) (8) (EN01, CPR01)]

- d. 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.

[40 C.F.R. § 63.6625 (h)]

e. If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to of 40 C.F.R. 63 Subpart ZZZZ or in items 5, 6, 7, 9, or 11 of Table 2d to of 40 C.F.R. 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to of 40 C.F.R. 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to of 40 C.F.R. 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. § 63.6625 (j) (EN01, CPR01)]

f. 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 (k) (EN02, EN03)]

[40 C.F.R. § 63.6625]

6.3. Other Requirements for Owners and Operators

6.3.1. 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.

[40 C.F.R. § 63.6615 (EN01, EN02)]

6.3.2. (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_i = concentration of CO or formaldehyde at the control device inlet,

C_o = 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 (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in 40 C.F.R. §§ 63.6620 (e) (2) (i) through (iii).

(i) Calculate the fuel-specific F_o 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_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$).

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($\text{dscf}/10^6 \text{ Btu}$).

(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{CO2} = [5.9 / F_o] \quad (Eq. 3)$$

Where:

X_{CO_2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent.

- (iii) Calculate the NO_x and SO₂ gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:

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

Where:

%CO₂ = Measured CO₂ 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 (EN02, EN03)]

6.4. Compliance Requirements for Owners and Operators

- 6.4.1. 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 this subpart, 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)]

6.4.2. 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)]

6.4.3. Records of the monitoring required in Section 6.2.1 shall be kept.

[40 C.F.R. § 63.6655 (d)]

6.4.4. The permittee must keep records of the maintenance conducted on each stationary RICE in order to demonstrate that the permittee operated and maintained each stationary RICE and after-treatment control device (if any) according to the permittee's own maintenance plan.

[40 C.F.R. § 63.6655 (e) (EN01, CPR01)]

6.5. Reporting Requirements for Owners and Operators

6.5.1. 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) (EN02, EN03)]

6.5.2. 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) (EN02, EN03)]

6.5.3. 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) (EN02, EN03)]

- 6.5.4. 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) (EN02, EN03)]

- 6.5.5. 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) (EN02, EN03)]

- 6.5.6. 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) (EN02, EN03)]

6.6. Compliance Plan

- 6.6.1. None

7.0. Emergency Generators [emission point ID(s): EG01, EG02]

7.1. Limitations and Standards

These engines are subject to the attached 45CSR13 General Permit G60-C034.

7.1.1. 40 C.F.R. § 63.6590 What parts of my plant does this subpart cover? (note the following section numbers match those of 40 C.F.R. §63.6590)

(c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

[40 C.F.R. §63.6590.]

Note: In G60-C034, the engines are subject to 40 C.F.R. part 60 subpart JJJJ, compliance with G60-C034 shall show compliance with 40 C.F.R. 63 Subpart ZZZZ.

7.2. Monitoring Requirements

7.2.1. N/A

7.3. Testing Requirements

7.3.1. N/A

7.4. Recordkeeping Requirements

7.4.1. N/A

7.5. Reporting Requirements

7.5.1. N/A

7.6. Compliance Plan

7.6.1. N/A