West Virginia Department of Environmental Protection

Harold D. Ward Cabinet Secretary

Permit to Operate



Pursuant to

Title V

of the Clean Air Act

Issued to:

Eastern Gas Transmission and Storage, Inc. Sardis Compressor Station R30-03300013-2022

Laura M. Crowder

Laura M. Crowder

Director, Division of Air Quality

Issued: June 28, 2022 • Effective: July 12, 2022 Expiration: June 28, 2027 • Renewal Application Due: December 28, 2026 Permit Number: R30-03300013-2022
Permittee: Eastern Gas Transmission and Storage, Inc.
Facility Name: Sardis Compressor Station

Permittee Mailing Address: 925 White Oaks Blvd., Bridgeport, WV 26330

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: Sardis, Harrison County, West Virginia

Facility Mailing Address: 566 Sardis Station Road, Clarksburg, WV 26301

Telephone Number: (681) 842-3000 Type of Business Entity: Corporation

Facility Description: Natural Gas Compressor Station

SIC Codes: Primary 4922; Secondary NA; Tertiary NA

UTM Coordinates: 552.89 km Easting • 4355.61 km Northing • Zone 17

Permit Writer: Frederick Tipane

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.

Table of Contents

1.0	Emission Units and Active R13, R14, and R19 Permits	3
2.0	General Conditions	5
3.0	Facility-Wide Requirements	14
	Source-specific Requirements	
4.0	Dehydration Unit Reboiler	22
5.0	Dehydration Unit Still and Dehydration Unit Flare	24
6.0	Emergency Generators	33
7.0	Reciprocating Internal Combustion Engines	41

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; Ingersoll Rand 36KVS-ET (4SLB)	1961	1000 HP	CC02
EN02	EN02	Reciprocating Engine/Integral Compressor; Ajax DPC-800 (2SLB)	1987	800 HP	N/A
EN03	EN03	Reciprocating Engine/Integral Compressor; Ajax DPC-2804LE (2SLB)	2012	750 HP	CC01
EG01	EG01	Emergency Generator, Cummins Power Generation Model No. GM8.1L (4SRB) (Manufactured 11/2010)	2011	192.5 BHP	NSCR1
EG02	EG02	Emergency Generator, Cummins Power Generation Model No. GM8.1L (4SRB) (Manufactured 11/2010)	2011	192.5 BHP	NSCR2
DEHY02	DEHY02	Glycol Dehydration Unit Still; Cameron	2012	22 mmscfd	FL03
RBR02	RBR02	Glycol Dehydration Unit Reboiler; Cameron	2012	1.437 MMBtu/hr	N/A
TK01	TK01	Vertical, aboveground tank containing engine oil	1961	2,730 gallons	N/A
TK02	TK02	Vertical, aboveground tank containing engine oil	1984	2,730 gallons	N/A
TK03	TK03	Horizontal, above ground tank containing ethylene glycol	1991	2,500 gallons	N/A
TK04	TK04	Horizontal, above ground tank containing Wastewater	2003	230 gallons	N/A
TK05	TK05	Horizontal, above ground tank containing produced fluids	2003	5,000 gallons	N/A
TK06	TK06	Vertical, above ground tank containing wastewater	2003	500 gallons	N/A
TK07	TK07	Horizontal, above ground tank containing triethylene glycol	1992	500 gallons	N/A
TK08	TK08	Horizontal, above ground storage tank containing used engine oil	2012	1,000 gallons	N/A
Control Devices					
FL03	FL03	QTI Q250 Dehydration Unit Flare	2015	175 scfm	N/A
CC01	EN03	Oxidation Catalyst	2012	N/A	N/A
CC02	EN01	Oxidation Catalyst	2013	N/A	N/A
NSCR1	EG01	Non-selective catalytic reduction device	2011	N/A	N/A
NSCR2	EG02	Non-selective catalytic reduction device	2011	N/A	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
G60-C026	January 4, 2011
R13-2915A	May 8, 2015

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
CBI	Confidential Business Information		Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM_{10}	Particulate Matterless than
C.F.R. or CFR	Code of Federal Regulations		10µm in diameter
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant
DEP	Department of Environmental		Deterioration
	Protection	psi	Pounds per Square Inch
FOIA	Freedom of Information Act	SIC	Standard Industrial
HAP	Hazardous Air Pollutant		Classification
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan
HP	Horsepower	SO_2	Sulfur Dioxide
lbs/hr or lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant
LDAR	Leak Detection and Repair	TPY	Tons per Year
m	Thousand	TRS	Total Reduced Sulfur
MACT	Maximum Achievable Control	TSP	Total Suspended Particulate
	Technology	USEPA	United States
mm	Million		Environmental Protection
mmBtu/hr	Million British Thermal Units per		Agency
	Hour	UTM	Universal Transverse
mmft ³ /hr <i>or</i>	Million Cubic Feet Burned per		Mercator
mmcf/hr	Hour	VEE	Visual Emissions
NA or N/A	Not Applicable		Evaluation
NAAQS	National Ambient Air Quality	VOC	Volatile Organic
	Standards		Compounds
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), record keeping, 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 a ccordance with 40 CFR 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 CFR §61.145, 40 CFR §61.148, and 40 CFR §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 CFR §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 CFR §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 CFR 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 CFR §§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 CFR §82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.

[40 CFR 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 CFR §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 CFR §68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.

[40 CFR 68]

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

[45CSR§17-3.1; State Enforceable Only]

3.1.10. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2915 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, R13-2915, 2.5.1.]

3.1.11. **Operation and Maintenance of Air Pollution Control Equipment**. The permittee shall, to the extent practicable, install, maintain, and operate the control devices listed in Section 1.1 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, R13-2915, 4.1.2.] (FL03 and CC01)

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 CFR 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., 45CSR13, R13-2915, 4.1.1., G60-C026 General Permit Registration, and G60-C, Condition 4.2.1.]

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 Malfunctions of Air Pollution Control Equipment**. For the control devices listed in Section 1.1, 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, R13-2915, 4.1.3.] (FL03 and CC01)

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 compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 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, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ: US EPA:

Director Section Chief

WVDEP U. S. Environmental Protection Agency, Region III Division of Air Quality Enforcement and Compliance Assurance Division

601 57th Street SE Air Section (3ED21) Charleston, WV 25304 1650 Arch Street

Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement¹:

DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 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 permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ: US EPA:

DEPAirQualityReports@wv.gov R3_APD_Permits@epa.gov

[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. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:

DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 - 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 - 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 - 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 - 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
 - [45CSR§30-5.1.c.3.B.]
- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. Reserved

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.
 - a. **40 CFR Part 60 Subpart IIII -** *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. The 1000 HP and 800 HP reciprocating engines with integral compressors (EN01 and EN02) were manufactured before July 11, 2005 and they are not compression ignition engines. Thus, these engines are not subject to 40 CFR Part 60 Subpart IIII. The 750 HP reciprocating engine with integral compressor (EN03) and emergency generators (EG01 and EG02) are not compression ignition engines as defined in 40 CFR §60.4219; therefore, these engines are not subject to 40 CFR Part 60 Subpart IIII.
 - b. **40 CFR Part 60 Subpart JJJJ** Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The 1000 HP and 800 HP reciprocating engines with integral compressors (EN01 and EN02) were manufactured before July 12, 2006. Thus, these particular engines are not subject to 40 CFR Part 60 Subpart JJJJ.
 - c. 40 CFR Part 63 Subpart HHH National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. The Sardis Station is not subject to Subpart HHH since the station transports production gas to Hastings Extraction Plant, and it is also not a storage station. Additionally, Sardis Station is a minor (area) source of HAPs.
 - d. **40** CFR 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The reboiler (RBR02) is not subject to this subpart since it is exempt by \$63.7491(h) as a boiler or process heater that is part of the affected source subject to another subpart of part 63 (i.e., Subpart HH). The definition of Glycol dehydration unit in \$63.761 reads that the "[Rich] glycol is then regenerated in the glycol dehydration unit reboiler." This implies that the reboiler is part of the glycol dehydration unit, and a TEG dehydration unit is the affected source specified in \$63.760(b)(2) for area sources of HAP. Moreover, the facility is not a major source of HAPs. For these reasons, Subpart DDDDD does not apply to the reboiler RBR02.
 - e. **40** CFR 63 Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. This subpart applies to an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP) according to §63.11193. The Sardis Station is an area source of HAPs and operates a reboiler RBR02. However, the reboiler RBR02 is not subject to this subpart since it is considered a *Process heater*, which is specifically excluded from the definition of Boiler, both of which are defined in 40 CFR §63.11237.
 - f. **40 CFR Part 64 Compliance Assurance Monitoring (CAM).** The facility does not have any pollutant specific emissions units (PSEU) that satisfied all of the applicability criteria requirements of 40 CFR §64.2(a). There have been no changes to any equipment at the facility since the last renewal that have resulted in a source satisfying the applicability requirements of 40 CFR §64.2(a) and becoming subject to CAM.

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:
 - 1. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;
 - 2. Identification of the engine(s) being temporarily replaced;
 - 3. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;
 - 4. Projected duration of the replacement engine(s); and
 - 5. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.0 Dehydration Unit Reboiler [emission point ID(s): RBR02]

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., 45CSR13, R13-2915, 6.1.1.]
- 4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 shall be determined in accordance with 40 CFR Part 60 Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1.). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.

 [45CSR§2-3.2., 45CSR13, R13-2915, 6.1.2.]
- 4.1.3. Maximum Design Heat Input. The maximum design heat input for the glycol dehydration unit reboiler (RBR02) is 1.437 MMBTU/hr. [45CSR13, R13-2915, 6.1.3.]
- 4.1.4. To demonstrate compliance with Section 4.1.5., the quantity of natural gas that shall be consumed in the 1.437 MMBTU/hr glycol dehydration unit reboiler (RBR02) shall not exceed 1,201 cubic feet per hour and 10.52 x 10⁶ cubic feet per year. [45CSR13, R13-2915, 6.1.4.]
- 4.1.5. Maximum emissions from the 1.437 MMBTU/hr glycol dehydration unit reboiler (RBR02) shall not exceed the following emission limits:

Pollutant	Maximum Hourly Emissions	Maximum Annual Emissions
Pollutant	lb/hour	TPY
Nitrogen Oxides	0.13	0.57
Carbon Monoxide	0.10	0.44
Volatile Organic Compounds	0.06	0.26

[45CSR13, R13-2915, 6.1.5.]

4.2. Monitoring Requirements

4.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Section 4.1.1. Method 9 shall be conducted in accordance with 40 CFR Part 60 Appendix A.

[45CSR13, R13-2915, 6.2.1.]

4.3. Testing Requirements

4.3.1. Reserved.

4.4. Recordkeeping Requirements

4.4.1. To demonstrate compliance with Sections 4.1.4. and 4.1.5., the permittee shall maintain monthly records of the amount of natural gas consumed in the reboiler (RBR02) and the hours of operation of the reboiler. 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. Upon request of the Director, any records submitted to the agency pursuant to a requirement of this permit shall be certified by a responsible official.

[45CSR13, R13-2915, 6.3.1.]

4.5. Reporting Requirements

4.5.1. Reserved.

4.6. Compliance Plan

4.6.1. Reserved.

5.0 Dehydration Unit Still and Dehydration Unit Flare [emission point ID(s): DEHY02 and FL03]

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:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, for Determining Maximum Allowable Particulate Emissions is:

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: $(5.43) \times [(474 \text{ lb/hr}) \times (\text{ton/}2000 \text{lb})] = 1.29 \text{ lb/hr}$

[45CSR§6-4.1.] (FL03)

- 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.] (FL03)
- 5.1.3. 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.] (FL03)
- 5.1.4. 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.] (FL03)
- 5.1.5. The permittee has defined the facility as a minor source of HAPs for existing source MACT applicability purposes. As a result, the subject facility shall conduct monitoring, testing, and reporting as specified below in order to provide adequate justification for maintaining minor source status. This requirement shall in no way restrict the permittee from conducting more frequent testing to quantify emissions increases.

 [40 CFR §63.10(b)(3), 40 CFR Part 63 Subpart HH; 45CSR34] (FL03)
- 5.1.6. 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 CFR §63.761) shall comply with the following:

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

$$L_{OPT} = 1.15 \times 3.0 \frac{gal\ TEG}{lb\ H_2O} \times \left(\frac{F \times (I-O)}{24\ hr/day}\right)$$

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 H_2O).

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 CFR §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 CFR §63.764(d)(2)(i), the owner or operator must calculate an alternate circulation rate using GRI–GLYCalcTM, 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 CFR §63.775(c)(7).
- c. Maintain a record of the determination specified in 40 CFR §63.764(d)(2)(ii) in accordance with the requirements in 40 CFR §63.774(f) and submit the Initial Notification in accordance with the requirements in 40 CFR §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 CFR §§63.764(d)(2)(i) or (ii) and submit the information specified under 40 CFR §63.775(c)(7)(ii) through (v).

Exemptions. The owner or operator of an area source is exempt from the requirements of paragraph (d) of \$63.764 if the criteria listed in paragraph (e)(1)(i) or (ii) of \$63.764 are met, except that the records of the determination of these criteria must be maintained as required in \$63.774(d)(1).

The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in §63.772(b)(2) of 40 CFR 63 Subpart HH.

[45CSR34; 40 CFR §§63.764(d)(2) and (e)(1)(ii)]

5.1.7. Maximum Throughput Limitation.

The maximum amount of wet natural gas processed through the glycol dehydration unit / still column (DEHY02) shall not exceed 22 mmscfd. Compliance with the Maximum Throughput Limitation shall be determined by measuring the daily wet natural gas processed through the glycol dehydration unit.

[45CSR§30-5.1.c., 45CSR13, R13-2915, 7.1.1.]

5.1.8. Maximum emissions from the QTI Q250 glycol dehydration unit flare (FL03) shall not exceed the following emission limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
NO _x	1.23	5.39
CO	0.07	0.32
Volatile Organic Compounds	7.34	32.15
Benzene	0.12	0.52
Toluene	0.21	0.90
Ethylbenzene	0.07	0.31
Xylene	0.52	2.26
n-Hexane	0.14	0.62

Compliance with the VOC and HAP limits shall be determined by running GLYCalc in accordance with NESHAP Subpart HH.

[45CSR13, R13-2915, 7.1.2.]

- 5.1.9. For purposes of determining potential HAP emissions at production-related facilities, the methods specified in 40 CFR Part 63 Subpart HH (i.e. excluding compressor engines from HAP PTE) shall be used. [45CSR13, R13-2915, 7.1.3.]
- 5.1.10. The QTI Q250 flare (FL03) subject to this section shall be designed and operated in accordance with the following:
 - a. Flare (FL03) shall be non-assisted.
 - b. The flare (FL03) shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
 - c. The flare (FL03) shall be operated, with a flame present at all times whenever emissions may be vented to them, except during SSM (Startup, Shutdown, Malfunctions) events.
 - d. A flare shall be used only where the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or where the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K Constant =
$$1.740 \times 10^{-7} \left(\frac{1}{ppmv} \right) \left(\frac{g - mole}{scm} \right) \left(\frac{MJ}{kcal} \right)$$

Where the standard temperature for (g-mole/scm) is 20 °C.

- C_i = Concentration of sample component i in ppmv on a wet basis, which may be measured for organics by Test Method 18, but is not required to be measured using Method 18 (unless designated by the Director).
- H_i = Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg.
 The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 if published values are not available or cannot be calculated.
- n = Number of sample components.
- e. Nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided by Sections 5.1.10.f. and 5.1.10.g. The actualexit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), by the unobstructed (free) cross-sectional area of the flare tip, which may be determined by Test Method 2, 2A, 2C, or 2D in 40 CFR Part 60 Appendix A, as appropriate, but is not required to be determined using these Methods (unless designated by the Director).
- f. Nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.10.e., equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
- g. Nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in Section 5.1.10.e., less than the velocity V_{max}, as determined by the calculation specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$$Log10(V_{max}) = (H_T + 28.8)/31.7$$

Where:

 $V_{max} = Maximum permitted velocity, m/sec.$

28.8 = Constant.

31.7 = Constant.

 H_T = The net heating value as determined in Section 5.1.10.d.

[45CSR13, R13-2915, 7.1.4.]

5.1.11. The permittee is not required to conduct a flare compliance assessment for concentration of sample (i.e. Method 18) and tip velocity (i.e. Method 2) until such time as the Director requests a flare compliance assessment to be conducted in accordance with Section 5.3.3., but the permittee is required to conduct a flare design evaluation in accordance with Section 5.4.3. Alternatively, the permittee may elect to demonstrate compliance with the flare design criteria requirements of Section 5.1.10. by complying with the compliance assessment testing requirements of Section 5.3.3.

[45CSR13, R13-2915, 7.1.5]

5.2. Monitoring Requirements

5.2.1. In order to demonstrate compliance with the minor source status claimed within Section 5.1.5. the permittee shall use GRI-GLYCalc V3 or higher to estimate emissions from the dehydration system. The dehydration system must be accurately defined by monitoring and recording actual operating parameters associated with the dehydration system. These parameters shall be measured periodically in order to define annual average values or if monitoring is not practical some parameters may be assigned default values as listed below. Periodically, shall be interpreted as sufficient enough to reflect annual variation and therefore, this term is operating parameter and site dependent.

The WV Division of Air Quality recommends the following actual operating parameters be measured or assumed to equal the default values listed below in order to satisfy this monitoring requirement when using the Gas Analysis and Process Data, GLYCalc emission modeling method:

- Natural Gas Flowrate:
 - Number of days operated per year,
 - ❖ Annual daily average (MMscf/day), and
 - Maximum design capacity (MMscf/time)
- Absorber temperature and pressure
- Lean glycol circulation rate
- ➤ Glycol pump type
- Flash tank temperature and pressure
- > Stripping Gas flow rate, if applicable
- Wet gas composition (upstream of the absorber dehydration column) Sampled in accordance with GPA method 2166 and analyzed consistent with GPA extended method 2286 as well as the procedures presented in the GRI-GLYCalc Technical Reference User Manual and Handbook V4.

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

- > Dry Gas water content at a point directly after exiting the dehydration column and before any additional separation points or assume pipeline quality at 7 lb H₂O / MMscf.
- Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI
- ➤ Lean glycol water content if not directly measured may use the default value of 1.5 % water as established by GRI.

[45CSR§30-5.1.c]

5.2.2. Visual emission checks of each emission point specified shall be conducted monthly. If during these checks or at any other time visible emissions are observed at any emission point, compliance shall be determined by conducting tests in accordance with Method 9 of 40 CFR 60, Appendix A (July 1, 1994). Records shall be

maintained on site stating the date and time of each visible emission check, whether visible emissions were observed, the opacity observed, and the corrective measures taken.

[45CSR§30-5.1.c.] (FL03)

5.2.3. In order to demonstrate compliance with the requirements of Section 5.1.10.c., the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device, except during SSM events.

[45CSR13, R13-2915, 7.2.1.]

5.2.4. The permittee shall monitor the throughput of wet natural gas processed through the dehydration system on a **daily and monthly** basis for the glycol dehydration unit (DEHY02).

[45CSR§30-5.1.c., 45CSR13, R13-2915, 7.2.2.]

5.3. Testing Requirements

5.3.1. Within the 3rd year of this permit term, the permittee shall determine the contents of the wet natural gas stream by analyzing the sample using GPA Method 2286 extended analysis. As specified in the handbook, the permittee shall sample the wet gas stream at a location prior to the glycol dehydration contactor column, but after any type of separation device, in accordance with GPA method 2166. The permittee may utilize other equivalent methods provided they are approved in advance by DAQ as part of a testing protocol. If alternative methods are proposed, a test protocol shall be submitted for approval no later than 60 days before the scheduled test date.

[45CSR§30-5.1.c.] (DEHY02)

5.3.2. In order to demonstrate compliance with the flare opacity requirements of 5.1.10.b. the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40 CFR Part 60 Appendix A, Method 22. The permittee shall conduct this test within one (1) year of permit issuance or initial startup whichever is later. 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 CFR Part 60 Appendix A, Method 22 or from the lecture portion of 40 CFR Part 60 Appendix A, Method 9 certification course.

[45CSR13, R13-2915, 7.3.1.]

5.3.3. The Director may require the permittee to conduct a flare compliance assessment to demonstrate compliance with Section 5.1.10. This compliance assessment testing shall be conducted in accordance with Test Method 18 for organics and Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR Part 60, as appropriate, or other equivalent testing approved in writing by the Director. Also, Test Method 18 may require the permittee to conduct Test Method 4 in conjunction with Test Method 18.

[45CSR13, R13-2915, 7.3.2.]

5.3.4. In order to demonstrate compliance with 5.1.9., upon request of the Director, the permittee shall demonstrate compliance with the HAP emissions thresholds using GLYCalc Version 3.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.

[45CSR13, R13-2915, 7.3.3.]

5.3.5. Determination of glycol dehydration unit flowrate, benzene emissions, or BTEX emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate, benzene emissions, or BTEX emissions.

The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the following procedures. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).

[40 CFR §63.772(b)(2)(i); 45CSR34]

5.4. Recordkeeping Requirements

5.4.1. For the purpose of demonstrating compliance with Sections 5.1.2. and 5.2.2., 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, and the results of the check(s). 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.

[45CSR§30-5.1.c]

5.4.2. For the purpose of demonstrating compliance with Sections 5.1.10.c. and 5.2.3., the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.

[45CSR13, R13-2915, 7.4.1.]

5.4.3. For the purpose of demonstrating compliance with Sections 5.1.10. and 5.3.3., the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.

[45CSR13, R13-2915, 7.4.2.]

5.4.4. For the purpose of demonstrating compliance with the requirements set forth in Section 5.1.10., the permittee shall maintain records of testing conducted in accordance with 5.3.4.

[45CSR13, R13-2915, 7.4.3.]

- 5.4.5. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of Sections 5.2.3. and 5.2.4. and testing requirements of Sections 5.3.2. through 5.3.4.
- 5.4.6. For the purpose of demonstrating compliance with Section 5.1.10.b., the permittee shall maintain records of the visible emission opacity tests conducted per Section 5.3.2.

[45CSR13, R13-2915, 7.4.5.]

[45CSR13, R13-2915, 7.4.4.]

5.4.7. For the purpose of demonstrating compliance with Section 5.1.9., the permittee shall maintain a record of all potential to emit (PTE) HAP calculations for the entire affected facility. These records shall include the natural gas compressor engines and ancillary equipment.

[45CSR13, R13-2915, 7.4.6.]

- 5.4.8. The permittee shall maintain a record of the wet natural gas throughput processed through the dehydration system to demonstrate compliance with the natural gas throughput limit set forth in Section 5.1.7. [45CSR13, R13-2915, 7.4.7.]
- 5.4.9. All records required under Sections 5.4.2. through 5.4.8. 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. Upon request by the Director, any records submitted to the agency pursuant to a requirement of this permit shall be certified by a responsible official.

 [45CSR13, R13-2915, 7.4.8.]
- 5.4.10. An owner or operator of a glycol dehydration unit that meets the exemption criteria in §63.764(e)(1)(ii) shall maintain the records specified in paragraph (d)(1)(ii) of §63.774, as appropriate, for that glycol dehydration unit.

The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with §63.772(b)(2) (permit condition 5.3.5.).

[40 CFR §63.774(d)(1)(ii); 45CSR34]

5.5. Reporting Requirements

[45CSR§30-5.1.c.]

- 5.5.1. The permittee shall submit by March 31st of the following year, an emission summary for the dehydration unit, which incorporates the wet gas testing results required by 5.3.1. These reports shall include an actual annual average emission estimate for the calendar year of the sample, modeled using GLYCalc V3 or higher software, which incorporates site specific parameters measured in accordance with 5.2.1. The permittee shall also supply all supporting documentation where site specific operating parameters are tabulated to define the annual average values. The report shall also incorporate a copy of the lab analysis obtained from the wet gas testing as well as a description of how and where the sample was taken. The report shall include a reference to all sampling and analytical methods utilized. Additionally, the permittee shall identify where the compressor station is located with respect to a custody transfer point, which is referenced within 40 C.F.R 63 Subpart HH as the point where the gas enters into a natural gas transmission and/or stora ge pipeline. This report shall be signed by a responsible official upon submittal.
- 5.5.2. If permittee is required by the Director to demonstrate compliance with Section 5.3.3., then the permittee shall submit a testing protocol at least thirty (30) days prior to testing and shall submit a notification of the testing date at least fifteen (15) days prior to testing. The permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.

 [45CSR13, R13-2915, 7.5.1.]
- 5.5.3. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40 CFR Part 60 Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the

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

[45CSR13, R13-2915, 7.5.2]

5.5.4. Any deviation(s) from the flare design and operation criteria in Section 5.1.10. shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of discovery of such deviation.

[45CSR13, R13-2915, 7.5.3]

5.6. Compliance Plan

5.6.1. Reserved.

6.0 Emergency Generators [emission point ID(s): EG01 and EG02]

6.1. Limitations and Standards

6.1.1. The permittee is authorized to operate the Emergency Generators (EG01 and EG02) with the following emission limits in accordance with all terms and conditions of the 45CSR13 G60-C Class II General Permit and General Permit Registration G60-C026.

Emission Unit	Pollutant	Maximum Hourly Emissions	Maximum Annual Emissions (1)	
		lb/hr	tpy	
	Nitrogen Oxides	0.03	0.01	
EG01	Carbon Monoxide	0.39	0.10	
EG01	Volatile Organic Compounds	0.19	0.05	
	Formaldehyde	0.03	0.01	
	Nitrogen Oxides	0.03	0.01	
EG02	Carbon Monoxide	0.39	0.10	
EG02	Volatile Organic Compounds	0.19	0.05	
	Formaldehyde	0.03	0.01	

⁽¹⁾ Based on operating the engine 500 hours per year.

Compliance with the streamlined emission limits will ensure compliance with the emission limits calculated from the emission standards for emergency engines $HP \ge 130$ from Table 1 of 40 CFR 60 Subpart JJJJ.

[45CSR13, G60-C026 General Permit Registration, Emission Limitations; General Permit G60-C, Conditions 2.3.1.c., 5.1.2. and 8.2.5; 40 CFR §60.4233(e); Table 1 of 40 CFR 60 Subpart JJJJ; 45CSR16]

6.1.2. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR \$60.4233 over the entire life of the engine.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 8.2.9.; 40 CFR §60.4234; 45CSR16]

- 6.1.3. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR §60.4233(d) or (e), you must demonstrate compliance according to one of the following methods:
 - a. Purchasing an engine certified according to procedures specified in 40 CFR Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR \$60.4243(a).
 - b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR §60.4233(d) or (e) and according to the requirements specified in 40 CFR §60.4244, as applicable, and according to 40 CFR §60.4243(b)(2)(i).

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 8.4.2.; 40 CFR §60.4243(b); 45CSR16]

6.1.4. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in this permit condition. In order for the engine to be considered an emergency

stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in this condition, is prohibited. If you do not operate the engine according to the requirements in this condition, the engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and must meet all requirements for non-emergency engines.

- a. There is no time limit on the use of emergency stationary ICE in emergency situations.
- b. You may operate your emergency stationary ICE for any combination of the purposes below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. of this permit condition counts as part of the 100 hours per calendar year allowed by the following:

Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

c. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. Except as provided in this section below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

- 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- 4. The power is provided only to the facility itself or to support the local transmission and distribution system.
- 5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 8.4.4.; 40 CFR §§60.4243(d)(1), (d)(2)(i)and (d)(3); 45CSR16]

6.1.5. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR §60.4233.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 8.4.5.; 40 CFR §60.4243(e); 45CSR16]

6.1.6. If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of this permit condition, perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 8.4.6.; 40 CFR §60.4243(f); 45CSR16]

6.1.7. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 8.4.7.; 40 CFR §60.4243(g); 45CSR16]

6.1.8. Emergency Generator Engines EG01 and EG02 must meet the requirements of 40 CFR Part 63 by meeting the requirements 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for these engines under 40 CFR Part 63.

[40 CFR §§63.6590(c) and (c)(1); 45CSR34]

6.1.9. Maximum Fuel Consumption Limitation. The maximum fuel consumption for any registered reciprocating internal combustion engine listed in the General Permit Registration application shall not exceed the fuel consumption recorded with registrant's Class II General Permit Registration Application without effecting a modification or administrative update. Compliance with the Maximum Yearly Fuel Consumption Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the fuel consumption at any given time during the previous twelve consecutive calendar months.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 5.1.3.]

- 6.1.10. Requirements for Use of Catalytic Reduction Devices
 - a. Rich-burn natural gas compressor engines equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the potential to emit for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to deliver additional fuel when required to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5%. The automatic air/fuel ratio controller shall also incorporate dual-point exhaust gas temperature and oxygen sensors which provide temperature and exhaust oxygen

content differential feedback. Such controls shall ensure proper and efficient operation of the engine and NSCR air pollution control device;

- b. The automatic air/fuel ratio controller or closed-loop automatic feedback controller shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element; and
- c. No person shall knowingly:
 - 1. Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A;
 - 2. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of General Permit G35-A; or
 - 3. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 5.1.4.a., c., and d.]

- 6.1.11. Operation and Maintenance of Air Pollution Control Equipment. The registrant shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in the issued General Permit Registration 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, G60-C026 General Permit Registration, and G60-C Condition 4.1.1.]
- 6.1.12. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the affected facility shall be less than 10 tons/year of any single HAP or 25 tons/year of any combination of HAPs. Compliance with this Section shall ensure that the affected facility is a minor HAP source.

 [45CSR13, G60-C026 General Permit Registration, and G60-C Condition 4.1.2.]
- 6.1.13. The reciprocating internal combustion engines listed in the General Permit Registration application shall be operated and maintained in accordance with the manufacturer's recommendations and specifications and in a manner consistent with good operating practices.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 5.1.1.]

6.2. Monitoring Requirements

- 6.2.1. **Catalytic Reduction Devices** The registrant shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The registrant shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:
 - a. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.
 - b. Following operating and maintenance recommendations of the catalyst element manufacturer.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 5.2.1.]

6.3. Testing Requirements

- 6.3.1. See Condition 3.3.1.
- 6.3.2. To demonstrate compliance with condition 6.1.10.a., the permittee shall verify that the closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 0.5% during any performance testing.

 [45CSR§30-5.1.c.]

6.4. Recordkeeping Requirements

- 6.4.1. See Condition 3.4.1.
- 6.4.2. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR §60.4233(d) or (e), you must demonstrate compliance by purchasing an engine certified according to procedures specified in 40 CFR 60 Subpart JJJJ, for the same model year and demonstrating compliance according to one of the following specified methods:
 - a. If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.
 - b. If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according the following.

If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

[45CSR13, G60-C026 General Permit Registration, and G60-C Conditions 8.4.2. and 8.4.1.; 40 CFR §\$60.4243(b)(1), (b)(2)(i) and §\$60.4243(a)(1), (a)(2), (a)(2)(ii); 45CSR16]

- 6.4.3. Owners and operators of all stationary SI ICE must keep the following records of the information.
 - a. All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification.
 - b. Maintenance conducted on the engine.

c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable.

[45CSR13, G60-C026 General Permit Registration, and G60-C Conditions 8.6.1.a., a.1., a.2., and a.3.; 40 CFR §§60.4245(a),(a)(1), (a)(2), and (a)(3); 45CSR16]

6.4.4. To demonstrate compliance with permit condition 6.2.1., the permittee shall maintain a copy of the site specific maintenance plan or manufacturer maintenance plan.

[45CSR§30-5.1.c.]

6.4.5. **Retention of records.** The registrant shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records. Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the registrant. 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. 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. Where appropriate, the registrant may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 3.5.1.]

- 6.4.6. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in the General Permit Registration, the registrant shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures specifically required in this permit. [45CSR13, G60-C026 General Permit Registration, and G60-C Condition 4.2.2.]
- 6.4.7. **Record of Malfunctions of Air Pollution Control Equipment**. For all air pollution control equipment listed in the General Permit Registration, the registrant 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, G60-C026 General Permit Registration, and G60-C Condition 4.2.3.]

6.4.8. **Minor Source of Hazardous Air Pollutants (HAP).** The registrant 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 6.1.12.

[45CSR13, G60-C026 General Permit Registration, and G60-C Condition 4.2.4.]

6.4.9. To demonstrate compliance with section 6.1.1. 6.1.9. and 6.1.13., the registrant shall maintain records of the amount and type of fuel consumed in each engine and the hours of operation of each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the registrant 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, G60-C026 General Permit Registration, and G60-C Condition 5.4.1.]

6.5. Reporting Requirements

- 6.5.1. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in 40 CFR §60.4243(d)(3)(i), you must submit an annual report according to the following requirements:
 - a. The report must contain the following information:
 - 1. Company name and address where the engine is located.
 - 2. Date of the report and beginning and ending dates of the reporting period.
 - 3. Engine site rating and model year.
 - 4. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
 - 5. Hours spent for operation for the purposes specified in 40 CFR \$60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR \$60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
 - b. Annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR §60.4.

[40 CFR §60.4245(e); 45CSR16]

6.6. Compliance Plan

6.6.1. Reserved.

7.0 Reciprocating Internal Combustion Engines [emission point ID(s): EN01, EN02, EN03]

7.1. Limitations and Standards

7.1.1. As stated in 40 CFR §63.6603, the permittee must comply with the following requirements from 40 CFR Part 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 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year (EN01)	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.		
Non amaganay nan	Change oil and filter every 4,320 hours of operation or annually, whichever comes first; ¹		
Non-emergency, non- black start 2SLB stationary RICE	Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and		
(EN02)	Inspect all hoses and belts every 4,320 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 CFR §63.6625(j) in order to extend the specified oil change requirement in Table 2d of 40 CFR Part 63 Subpart ZZZZ.

[45CSR34, 40 CFR §63.6603(a), Items #6 and #9 in Table 2d of Subpart ZZZZ] (EN01 and EN02)

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

[45CSR34, 40 CFR §63.6605] (EN01 and EN02)

7.1.3. For EN02, 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:

[45CSR34, 40 CFR §63.6625(e)(5)] (EN02)

- 7.1.4. If you own or operate a stationary SI engine that is subject to the work, operation or management practices in item 6 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to this subpart. 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 business 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 business 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. [45CSR34, 40 CFR §63.6625(j)] (EN02)
- 7.1.5. 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 Table 2d to 40 CFR 63 Subpart ZZZZ.

 [45CSR34, 40 CFR §63.6625(h)] (EN01 and EN02)
- 7.1.6. The permittee shall demonstrate continuous compliance by doing the following:
 - a. The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d of 40 CFR Part 63 Subpart ZZZZ that apply to the permittee according to methods specified in Table 6 of 40 CFR Part 63 Subpart ZZZZ.
 - 1. For EN01, complying with the requirement to install an oxidation catalyst, the permittee must demonstrate continuous compliance by:
 - i. Conducting annual compliance demonstrations as specified in 40 CFR §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; and either
 - ii. Collecting the catalyst inlet temperature data according to 40 CFR §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or
 - iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
 - 2. For EN02, complying with the work or management practices requirement, the permittee must demonstrate continuous compliance by:
 - Operating and maintaining the stationary RICE according to the manufacturer's emissionrelated operation and maintenance instructions; or

- ii. 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 Table 2d of 40 CFR Part 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 CFR \$63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

[45CSR34, 40 CFR §§63.6640(a) and (b) and Table 6 of 40 CFR 63 Subpart ZZZZ] (EN01 and EN02)

7.1.7. To demonstrate compliance with Section 7.1.8., the quantity of natural gas that shall be consumed in the 750 HP Ajax DPC-2804LE natural gas fired reciprocating engine shall not exceed 4,925 cubic feet per hour and 43.14 x 10⁶ cubic feet per year.

[45CSR13, R13-2915, 5.1.1.] (EN03)

7.1.8. Maximum emissions from the 750 HP Ajax DPC-2804LE natural gas fired reciprocating engine shall not exceed the following emission limits:

Pollutant	Maximum Hourly Emissions LB/hour	Maximum Annual Emissions TPY	
Nitrogen Oxides	1.66	7.20	
Carbon Monoxide	1.24	5.40	
Volatile Organic Compounds	0.50	2.20	
Formaldehyde	0.33	1.43	

Compliance with the streamlined emission limits for NO_X , CO, and VOC will ensure compliance with the emission limits calculated from the emission standards for EN03 from Table 1 of 40 CFR Part Subpart JJJJ (see Section 7.1.13).

[45CSR13, R13-2915, 5.1.2.] (EN03)

- 7.1.9. Requirements for Use of Catalytic Reduction Devices: No person shall knowingly:
 - a. Remove or render inoperative the Catalytic Converter (CC01);
 - b. Install any part or component when the principal effect of the part or component is to bypass, defeat or render inoperative the Catalytic Converter (CC01); or
 - c. Cause or allow engine exhaust gases to bypass the Catalytic Converter (CC01).

[45CSR13, R13-2915, 5.1.3.] (EN03)

7.1.10. The provisions of 40 CFR Part 60 Subpart JJJJ are applicable to owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified below. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).

[45CSR16, 40 CFR §60.4230(a)(3)(ii), 45CSR13, R13-2915, 8.1.1., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)

7.1.11. If you are an owner or operator of an area source subject to 40 CFR Part 60 Subpart JJJJ, you are exempt from the obligation to obtain a permit under 40 CFR Part 70 or 40 CFR Part 71, provided you are not required to obtain a permit under 40 CFR §70.3(a) or 40 CFR §71.3(a) for a reason other than your status as an area source under 40 CFR Part 60 Subpart JJJJ. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §\$63.6590(c) and (c)(1).

 $[45CSR16, 40\ CFR\ \$60.4230(c), 45CSR13,\ R13-2915, 8.1.2., 40\ CFR\ \$\$63.6590(c)\ and\ (c)(1),\ 45CSR34]$ (EN03)

7.1.12. Stationary SI ICE may be eligible for exemption from the requirements of 40 CFR Part 60 Subpart JJJJ as described in 40 CFR Part 1068 Subpart C (or the exemptions described in 40 CFR Parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).

[45CSR16, 40 CFR §60.4230(e), 45CSR13, R13-2915, 8.1.3., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)

7.1.13. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to 40 CFR Part 60 Subpart JJJJ for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1,2011 that were certified to the certification emission standards in 40 CFR Part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to 40 CFR Part 60 Subpart JJJJ, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

Subpart JJJJ Table 1 Emission Standards ^a							
g/HP-hr			ppmvd at 15% O ₂				
NO_X	СО	VOCd	NO_X	CO	VOCd		
1.0	2.0	0.7	82	270	60		

Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂.

^d For purposes of 40 CFR Part 60 Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

(EN03)

Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).

[45CSR16, 40 CFR §60.4233(e) and Table 1 of 40 CFR 60 Subpart JJJJ, 45CSR13, R13-2915, 8.2.1., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)

- 7.1.14. Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in 40 CFR §60.4233(e). Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §63.6590(c) and (c)(1). [45CSR16, 40 CFR 860.4233(h), 45CSR13, R13-2915, 8.2.2., 40 CFR 8863.6590(c) and (c)(1), 45CSR341
 - $[45CSR16, 40\ CFR\ \$60.4233(h), 45CSR13,\ R13-2915, 8.2.2., 40\ CFR\ \$\$63.6590(c)\ and\ (c)(1),\ 45CSR34]\ (EN03)$
- 7.1.15. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR §60.4233 over the entire life of the engine. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).
 - [45CSR16, 40 CFR §60.4234, 45CSR13, R13-2915, 8.2.3., 40 CFR §\$63.6590(c) and (c)(1), 45CSR34] (EN03)
- 7.1.16. After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 CFR \$60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in 40 CFR \$60.4233 may not be installed after January 1, 2010. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR \$\$63.6590(c) and (c)(1).
 - [45CSR16, 40 CFR §60.4236(b), 45CSR13, R13-2915, 8.3.1., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)
- 7.1.17. The requirements of 40 CFR §60.4236 do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §63.6590(c) and (c)(1).

 [45CSR16, 40 CFR §60.4236(e), 45CSR13, R13-2915, 8.3.2., 40 CFR §63.6590(c) and (c)(1), 45CSR34]
- 7.1.18. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 CFR §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in 40 CFR §§60.4243(b)(1) and (2).
 - a. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR §60.4243 (a).
 - b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR §60.4233(d) or (e) and according to the requirements specified in 40 CFR §60.4244, as applicable, and according to 40 CFR §60.4243(b)(2)(i) and (ii).
 - 1. If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner

consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

2. If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).

[45CSR16, 40 CFR §60.4243(b), 45CSR13, R13-2915, 8.4.1., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)

7.1.19. Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR §60.4233. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §863.6590(c) and (c)(1).

 $[45CSR16, 40\ CFR\ \$60.4243(e), 45CSR13,\ R13-2915, 8.4.2.,\ 40\ CFR\ \$\$63.6590(c)\ and\ (c)(1),\ 45CSR34]$ (EN03)

7.1.20. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).

[45CSR16, 40 CFR §60.4243(g), 45CSR13, R13-2915, 8.4.3., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)

- 7.1.21. **40 CFR 60 Subpart OOOO Applicable Standard.** You must replace the reciprocating compressor rod packing according to either paragraph a. or b. of this condition.
 - a. Before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
 - b. Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.

[40 CFR §§60.5385(a), (a)(1), and (a)(2), 45CSR16] (EN03 Compressor)

7.1.22. **40 CFR 60 Subpart OOOO Continuous Compliance.** For each reciprocating compressor affected facility complying with §§60.5385(a)(1) or (2), you must demonstrate continuous compliance according to paragraphs a. through c. of this condition.

- a. You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
- b. You must submit the annual report as required in §60.5420(b) (permit condition 7.5.10.) and maintain records as required in §60.5420(c)(3) (permit condition 7.4.7.).
- c. You must replace the reciprocating compressor rod packing before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

[40 CFR §§60.5415(c),(c)(1), (c)(2), and (c)(3), §60.5385(c),45CSR16] (EN03 Compressor)

7.2. Monitoring Requirements

- 7.2.1. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR Part 63 Subpart ZZZZ, you must install, operate, and maintain each CPMS according to the requirements in 40 CFR §§63.6625(b)(1) through (6) listed below.
 - a. You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 CFR §863.6625(b)(1)(i) through (v) and in 40 CFR §63.8(d). As specified in 40 CFR §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR §63.6625(b)(1) through (5) in your site-specific monitoring plan.
 - 1. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - 2. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
 - 3. Equipment performance evaluations, system accuracy audits, or other audit procedures;
 - 4. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR §§63.8(c)(1)(ii) and (c)(3); and
 - 5. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR §§63.10(c), (e)(1), and (e)(2)(i).
 - b. You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
 - c. The CPMS must collect data at least once every 15 minutes (see also 40 CFR §63.6635).
 - d. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
 - e. You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

f. You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

[45CSR34, 40 CFR §63.6625(b)] (EN01)

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

[45CSR34, 40 CFR §63.6635](EN01)

7.2.3. Catalytic Oxidizer Control Devices

The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices and auxiliary air pollution control devices by:

- a. Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller.
- b. Following operating and maintenance recommendations of the catalyst element manufacturer.

[45CSR13, R13-2915, 5.2.1.] (EN03)

7.3. Testing Requirements

- 7.3.1. The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
 - a. The compliance demonstration must consist of at least one test run.
 - b. Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

- c. If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of 40 CFR 63, Subpart ZZZZ, or using appendix A to this subpart.
- d. If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- e. You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.
- f. If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.
- g. If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of 40 CFR 63, Subpart ZZZZ, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of 40 CFR 63, Subpart ZZZZ. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of 40 CFR 63, Subpart ZZZZ.

[45CSR34, 40 CFR §63.6640(c)] (EN01)

- 7.3.2. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in 40 CFR §§60.4244(a) through (f).
 - a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR §60.8 and under the specific conditions that are specified by Table 2 to 40 CFR Part 60 Subpart JJJJ.
 - b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
 - c. You must conduct three separate test runs for each performance test required in this section, as specified in 40 CFR §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
 - d. To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of 40 CFR 60.4244:

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

Where:

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

 C_d = Measured NO_X concentration in parts per million by volume (ppmv).

 1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

e. To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of 40 CFR §60.4244:

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

Where:

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

 C_d = Measured CO concentration in ppmv.

 1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

f. For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of 40 CFR §60.4244:

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

Where:

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

 $C_d = VOC$ concentration measured as propane in ppmv.

 1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

g. If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR Part 60 Appendix A, or Method 320 of 40 CFR Part 63 Appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of 40 CFR §60.4244.

$$RF_{i} = \frac{C_{Mi}}{C_{Ai}} \qquad (EQ. 4)$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

 C_{Mi} = Measured concentration of compound in ppmv as carbon.

 C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas}$$
 (EQ. 5)

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad (EQ. 6)$$

Where:

 C_{Peq} = Concentration of compound in mg of propane equivalent per DSCM.

Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR \S 63.6590(c) and (c)(1).

[45CSR16, 40 CFR §60.4244, 45CSR13, R13-2915, 8.5.1., 40 CFR §§63.6590(c) and (c)(1), 45CSR34] (EN03)

7.4. Recordkeeping Requirements

- 7.4.1. If the permittee must comply with the emission and operating limitations of 40 CFR Part 63 Subpart ZZZZ, 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 CFR §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 CFR §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 CFR §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.

[45CSR34, 40 CFR §63.6655(a)] (EN01)

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

[45CSR34, 40 CFR §63.6655(b)] (EN01)

[45CSR34, 40 CFR §63.6655(e)] (EN02)

- 7.4.3. The permittee shall keep the records required in Table 6 of 40 CFR Part 63 Subpart ZZZZ to show compliance with each emission or operating limitation that applies. *Refer to permit condition* 7.1.6.a. [45CSR34, 40 CFR §63.6655(d)] (EN01 and EN02)
- 7.4.4. 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.
- 7.4.5. To demonstrate compliance with Sections 7.1.7. and 7.1.8., the permittee shall maintain monthly records of the amount of natural gas consumed in the engine (EN03) and the hours of operation of the engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Upon request by the Director, any records submitted to the agency pursuant to a requirement of this permit shall be certified by a responsible

[45CSR13, R13-2915, 5.3.1.] (EN03)

official.

- 7.4.6. Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.
 - a. Owners and operators of all stationary SI ICE must keep records of the information in 40 CFR §§60.4245(a)(1) through (4).

- 1. All notifications submitted to comply with this subpart and all documentation supporting any notification.
- 2. Maintenance conducted on the engine.
- 3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Part 1048.
- 4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR §60.4243(a)(2), documentation that the engine meets the emission standards.
- b. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
- c. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR §60.4231 must submit an initial notification as required in 40 CFR §60.7(a)(1). The notification must include the information in 40 CFR §60.4245(c)(1) through (5).
 - 1. Name and address of the owner or operator;
 - 2. The address of the affected source;
 - Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - 4. Emission control equipment; and
 - 5. Fuel used.
- d. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR §60.4244 within 60 days after the test has been completed.

Compliance with this 40 CFR 60 Subpart JJJJ requirement ensures compliance with 40 CFR 63 Subpart ZZZZ in accordance with 40 CFR §§63.6590(c) and (c)(1).

 $[45CSR16,\ 40\ CFR\ \S 60.4245,45CSR13,\ R13-2915,\ 8.6.1.,\ 40\ CFR\ \S \S 63.6590(c)\ and\ (c)(1),\ 45CSR34]$ (EN03)

7.4.7. **40 CFR 60 Subpart OOOO Recordkeeping Requirements.** You must maintain the records identified as specified in 40 CFR §60.7(f) and in this permit condition. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years.

For each reciprocating compressor affected facility, you must maintain the following:

- a. Records of the cumulative number of hours of operation or number of months since initial startup or October 15, 2012, or the previous replacement of the reciprocating compressor rod packing, whichever is later.
- b. Records of the date and time of each reciprocating compressor rod packing replacement, or date of installation of a rod packing emissions collection system and closed vent system as specified in §60.5385(a)(3).
- c. Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385 (permit condition 7.1.21.).

[40 CFR §§60.5420(c) and (c)(3), §60.5385(d), 45CSR16] (EN03)

7.5. Reporting Requirements

7.5.1. You must submit each report in Table 7 of 40 CFR Part 63 Subpart ZZZZ that applies to you. As stated in §63.6650, you must comply with the following requirements for reports:

For each existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year, you must submit a Compliance report. The report must contain the results of the annual compliance demonstration, if conducted during the reporting period. You must submit the report semiannually according to the requirements in §§63.6650(b)(1)-(5).

[45CSR34, 40 CFR §63.6650(a), Item #3 in Table 7 of 40 CFR 63 Subpart ZZZZ] (EN01)

- 7.5.2. Unless the Administrator has approved a different schedule for submission of reports under 40 CFR \$63.10(a), you must submit each report by the date in Table 7 of 40 CFR Part 63 Subpart ZZZZ and according to the requirements in 40 CFR \$863.6650(b)(1) through (b)(5).
 - a. 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 CFR §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 CFR §63.6595.
 - b. 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 CFR §63.6595.
 - c. 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.

- d. 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.
- e. 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 CFR §\$63.6650(b)(1) through (4).

[45CSR34, 40 CFR §§63.6650(b), (b)(1) through (b)(5)] (EN01)

- 7.5.3. The Compliance report must contain the information in 40 CFR §§63.6650(c)(1) through (6).
 - a. Company name and address.
 - b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - c. Date of report and beginning and ending dates of the reporting period.
 - d. 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 CFR §63.6605(b), including actions taken to correct a malfunction.
 - e. 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.
 - f. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

[45CSR34, 40 CFR §63.6650(c)] (EN01)

- 7.5.4. For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in 40 CFR 63, Subpart ZZZZ, the Compliance report must contain the information specified in 40 CFR §§63.6650(c)(1) through (4) and 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.

[45CSR34, 40 CFR §63.6650(d)] (EN01)

- 7.5.5. 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 40 CFR 60 Subpart ZZZZ, you must include information in 40 CFR §§63.6650(c)(1) through (4) and (e)(1) through (12).
 - a. The date and time that each malfunction started and stopped.
 - The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - c. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR §63.8(c)(8).
 - d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - e. 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.
 - f. 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.
 - g. 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.
 - h. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
 - i. A brief description of the stationary RICE.
 - j. A brief description of the CMS.
 - k. The date of the latest CMS certification or audit.
 - 1. A description of any changes in CMS, processes, or controls since the last reporting period.

[45CSR34, 40 CFR §63.6650(e)] (EN01)

- 7.5.6. Each affected source that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR \$70.6(a)(3)(iii)(A) or 40 CFR \$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 CFR \$70.6(a)(3)(iii)(A) or 40 CFR \$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. [45CSR34, 40 CFR §63.6650(f)] (EN01)
- 7.5.7. You must submit all of the notifications in 40 CFR §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

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

[45CSR34, 40 CFR §63.6645(a)(2)] (EN01)

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

[45CSR34, 40 CFR §63.6645(g)] (EN01)

7.5.9. You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

[45CSR34, 40 CFR §63.6640(e)] (EN01)

- 7.5.10. 40 CFR 60 Subpart OOOO Reporting Requirements. You must submit annual reports containing the information specified in paragraphs a. and b. of this condition to the Administrator. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410. Subsequent annual reports are due no later than same date each year as the initial annual report. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.
 - a. The general information specified in paragraphs 1. through 4. of this condition.
 - 1. The company name and address of the affected facility.
 - 2. An identification of each affected facility being included in the annual report.
 - 3. Beginning and ending dates of the reporting period.
 - 4. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
 - For each reciprocating compressor affected facility, the information specified in paragraphs 1. through 2. of this condition.
 - 1. The cumulative number of hours of operation or the number of months since initial startup, since October 15, 2012, or since the previous reciprocating compressor rod packing replacement, whichever is later.
 - 2. Records of deviations specified in paragraph (c)(3)(iii) of §60.5420 that occurred during the reporting period (permit condition 7.4.7.).

[40 CFR §§60.5420(b), (b)(1), and (b)(4), §60.5385(d), 45CSR16] (EN03 Compressor)

7.6. Compliance Plan

7.6.1. Reserved.