West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Title V Operating Permit Revision

For Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Action Number: MM01 **SIC:** 4922
Name of Permittee: Columbia Gas Transmission, LLC
Facility Name/Location: Adaline Compressor Station
County: Marshall County
Permittee Mailing Address: 1700 MacCorkle Avenue SE, Charleston WV 25314

Description of Permit Revision: This minor modification incorporates the revisions made with the Modification Permit R13-2149E. The revisions include the installation and operation of one compressor engine, one emergency generator, one line heater, and one methanol storage tank. Additionally, the permittee has also requested to reclassify the facility's DEG dehydration units to "small glycol dehydration units" under 40 C.F.R. Part 63 Subpart HHH as well as other administrative changes.

Title V Permit Information:
Permit Number: R30-05100100-2022
Issued Date: July 29, 2022
Effective Date: August 12, 2022
Expiration Date: July 29, 2027

Directions To Facility: From WV-2 N, travel 4.5 miles and turn right onto Proctor Creek Road. Travel 2.2 miles and take a slight right onto St. Joseph Baker Hill. Travel 2.2 miles and take a sharp left to stay on St. Joseph Baker Hill. Travel 5.2 miles and turn right onto Fish Creek Road. In 5.8 miles, the compressor station is on the left.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

Laura M. Crowder Laura M. Crowder Digitally signed by: Laura M. Crowder DN: CN = Laura M. Crowder email = Laura.M.Crowder@wv.gov C = US O = WV DEP OU = DAQ Date: 2024.07.02 17:31:22 -04'00'

Laura M. Crowder
Director, Division of Air Quality

July 2, 2024
Date Issued

Permit Number: **R30-05100100-2022**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Adaline Compressor Station**
Permittee Mailing Address: **1700 MacCorkle Avenue SE, Charleston, WV 25314**

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:	Cameron, Marshall County, West Virginia
Facility Mailing Address:	18123 Fish Creek Rd., Cameron, WV 26033
Telephone Number:	304-357-2047
Type of Business Entity:	LLC
Facility Description:	Natural Gas Transmission Facility
SIC Codes:	4922
UTM Coordinates:	530.456 km Easting • 4,401.860 km Northing • Zone 17

Permit Writer: Natalya V. Chertkovsky-Veselova

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

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

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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
BLR4	BL4	Heating System Boiler; American Standard Model #1-B-J-3	1961	3.48 MMBtu/hr	None
HTR2	H2	Natural Gas Heater; BS&B Model #70S-2	1956	1.0 MMBtu/hr	None
HTR3	H3	Line Heater	2024	1.615 MMBtu/hr	None
BLR5	BL5	DEG Dehydrator Reboiler	2010	0.55 MMBtu/hr	None
BLR6	BL6	DEG Dehydrator Reboiler	2010	0.55 MMBtu/hr	None
BLR7	BL7	DEG Dehydrator Reboiler	2010	0.55 MMBtu/hr	None
08101	E01	Reciprocating Engine/Integral Compressor; Clark HRA-8; 2-cycle, lean burn	1954	880 hp	None
08102	E02	Reciprocating Engine/Integral Compressor; Clark HRA-8; 2-cycle, lean burn	1954	880 hp	None
08103	E03	Reciprocating Engine/Integral Compressor; Clark HRA-8; 2-cycle, lean burn	1956	880 hp	None
08104	E04	Reciprocating Engine/Integral Compressor; Clark TLA-6, 2-cycle, lean Burn	1961	2,000 hp	None
08105	E05	Reciprocating Engine/Integral Compressor; Clark TLA-6, 2-cycle, lean Burn	1961	2,000 hp	None
081G3	G3	Reciprocating Engine/Generator; Waukesha VGF18GL; 4-cycle, lean burn; Emergency	1998	440 hp	None
081G4	G4	Emergency RICE; Waukesha VGF-L36GL; 4-cycle, lean burn	2024	880 hp	None
08107	E07	Turbine Engine/Centrifugal Compressor; Solar Saturn T-1001	1966	1,080 hp	None
08108	E08	Compressor RICE; Caterpillar G3612; 4-cycle, lean burn	2024	3,700 hp	OxCat
A11	E11	Pipeline Liquids Tank	1956	5014 gal	None
A12	E12	Pipeline Liquids Tank	1956	5014 gal	None
A08	E08	Pipeline Liquids Tank	1954	2000 gal	None
A09	E09	Pipeline Liquids Tank	1954	2000 gal	None
A10	E10	Pipeline Liquids Tank	1954	2000 gal	None
A25	A25	Methanol Storage Tank	2024	2,000 gal	None
DEG-DEHY1	FLLP1 ~~FL1~~	DEG Dehydrator; BS&B Contact Tower, 6-bubble cap trays	1985	117 MM scf/d	FLLP1 ~~FLLP2~~

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
DEG-DEHY2	FLLP1 ~~FL1~~	DEG Dehydrator; BS&B Contact Tower, 6-bubble cap trays	1984	117 MM scf/d	FLLP1 ~~FLLP2~~
DEG-DEHY3	FLLP1 ~~FL1~~	DEG Dehydrator; BS&B Contact Tower, 6-bubble cap trays	1984	117 MM scf/d	FLLP1 ~~FLLP2~~
Control Devices					
FLLP1 ~~FLLP2~~	FL1 ~~FL2~~	Dehydrator Flare; ETI	2018	6 MMBtu/hr	N/A

1.2. Active R13, R14, and R19 Permits

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

Permit Number	Date of Issuance
~~R13-2149D~~	~~May 21, 2018~~
R13-2149E	January 08, 2024

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§30-2.39.~~12.~~). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

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

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NSPS**	New Source Performance Standards
CBI	Confidential Business Information	**PM**	Particulate Matter
CEM	Continuous Emission Monitor	**PM_{10}**	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	**pph**	Pounds per Hour
C.F.R. *or* CFR	Code of Federal Regulations	**ppm**	Parts per Million
CO	Carbon Monoxide	**PSD**	Prevention of Significant Deterioration
C.S.R. *or* CSR	Codes of State Rules	**psi**	Pounds per Square Inch
DAQ	Division of Air Quality	**SIC**	Standard Industrial Classification
DEP	Department of Environmental Protection	**SIP**	State Implementation Plan
FOIA	Freedom of Information Act	**SO_2**	Sulfur Dioxide
HAP	Hazardous Air Pollutant	**TAP**	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	**TPY**	Tons per Year
HP	Horsepower	**TRS**	Total Reduced Sulfur
lbs/hr *or* lb/hr	Pounds per Hour	**TSP**	Total Suspended Particulate
LDAR	Leak Detection and Repair	**USEPA**	United States Environmental Protection Agency
m	Thousand	**UTM**	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	**VEE**	Visual Emissions Evaluation
mm	Million	**VOC**	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour		
NA *or* N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

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

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

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

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

2.7. Minor Permit Modifications

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

2.8. Significant Permit Modification

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

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

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

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

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

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

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

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

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.40]

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. Reserved~~Emergency~~

~~2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.~~
~~[45CSR§30-5.7.a.]~~

~~2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology based emission limitations if the conditions of 45CSR§30-5.7.c. are met.~~
~~[45CSR§30-5.7.b.]~~

~~2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:~~

~~a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;~~

~~b. The permitted facility was at the time being properly operated;~~

~~c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and~~

~~d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.~~

~~**[45CSR§30-5.7.c.]**~~

~~2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.~~
~~**[45CSR§30-5.7.d.]**~~

~~2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.~~
~~**[45CSR§30-5.7.e.]**~~

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

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

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof. **[45CSR§30-5.6.a.]**

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

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding. **[45CSR§30-5.3.e.3.B.]**

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect. **[45CSR§30-5.1.e.]**

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. **[40 C.F.R. §61.145(b) and 45CSR34]**

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. **[45CSR§4-3.1 State-Enforceable only.]**

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. **[45CSR§11-5.2]**

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. **[W.Va. Code § 22-5-4(a)(14)]**

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

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

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

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

3.1.9. Facilities using Mercaptan Tanks shall use proper odor control methods to comply with 45CSR4.
[45CSR§30-12.7 State-Enforceable only]

3.1.10. Emergency Operating Condition/Unit Replacement:

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) business days;

e. The permittee must provide written notification to the Director within five (5) business days of the replacement. This notification must contain:

i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;

ii. Identification of the engine(s) being temporarily replaced;

iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;

iv. Projected duration of the replacement engine(s); and

v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

3.1.11. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
[45CSR§17-3.1. State-Enforceable only]

3.2. Monitoring Requirements

3.2.1. Reserved.

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

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

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

3.4. Recordkeeping Requirements

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

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-2149, 4.1.1 (081G3, 081G4, 08108, DEG-DEHY1, DEG-DEHY2, DEG-DEHY3, ~~FLLP2~~FLLP1, BLR5, BLR6, BLR7, HTR3)]

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.

3.5. 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:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

DAQ Compliance and Enforcement[1]:
DEPAirQualityReports@wv.gov

[1]For 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**~~**Fees.** 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. **[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:
DEPAirQualityReports@wv.gov

US EPA:
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. **Reserved.** ~~**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. Reserved. ~~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 email~~telefax~~. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.5.10. During Compliance certification, the facility shall certify that the facility burns natural gas in all stationary equipment regulated under this permit except, when applicable, for emergency equipment (i.e. diesel generators).
[45CSR§30-5.1.c.3.C.]

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. **45CSR10 – *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides*** – This rule is not applicable to the facility's boilers (BLR4, BLR5, BLR6 and BLR7) and heaters (HTR2 and HTR3) because their maximum design heat input (DHI) is less than 10 MMBtu/hr.

b. **45CSR21– *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*** – All storage tanks at the station, which are listed as insignificant sources, are below 40,000 gallons in capacity which exempts the facility from 45CSR§21-28. The compressor station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29.

c. **45CSR27 – *To Prevent and Control the Emissions of Toxic Air Pollutants*** – Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.

d. **40 C.F.R. 60 Subpart Dc – *Standards of Performance for Steam Generating Units*** – The heating system boilers (BLR4, BLR5, BLR6 and BLR7) and line heaters (HTR2 and HTR3) at this facility are both less than 10 mmBtu/hr; Hence Subpart Dc is not applicable in accordance with §60.40c(a).

e. **40 C.F.R. 60 Subpart K, Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids*** – All tanks at the facility are below 40,000 gallons in capacity as specified in §§60.110(a) and 60.110a(a).

f. **40 C.F.R. 60 Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*** – All tanks at the facility are below 75m^3 (19,813 gallons) in capacity as specified in §60.110b(a).

g. **40 C.F.R. 60 Subpart GG – *Standards of Performance for Stationary Gas Turbines*** – The Solar Turbine was installed in 1966 which predates this NSPS's applicability trigger date of October 3, 1977 as defined in §60.330(b).

h. **40 C.F.R. 60 Subpart KKK – *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant*** – This compressor station is not engaged in the extraction or fractionation

of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.

i. **40 C.F.R. 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*** – There are no compression ignition engines at this facility.

j. **40 C.F.R. 60 Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*:** ~~All engines at the facility~~ The spark ignition internal combustion engines 08101 to 08105 and 081G3 were constructed, reconstructed, or modified prior to the June 12, 2006 applicability date listed in §60.4230(a)(4).

k. **40 C.F.R. 60 Subpart KKKK – *Standards of Performance for Stationary Combustion Turbines*** – The Solar Turbine was installed in 1966, which predates this NSPS's applicability date of February 18, 2005 as specified in §60.4305(a).

l. **40 C.F.R. 60 Subpart OOOO – *Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution*** – This subpart does not apply to the facility since the facility is a transmission facility. So it is exempt from the requirements for gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers. Although this applies to storage vessels located at transmission facilities, there have been no storage vessels constructed, modified, or reconstructed after August 23, 2011, and on or before September 18, 2015 in accordance with §60.5365(e).

m. **40 C.F.R. 60 Subpart OOOOa – *Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 and on or Before December 6, 2022*.** ~~None of the~~ The storage vessels A08 to A12 and the compressors 08101 to 08105 and 08107 ~~at the facility~~ were constructed, modified, or reconstructed before ~~after~~ September 18, 2015. The storage vessel A25 and the compressor 08108 were constructed after December 6, 2022. Therefore, this subpart does not apply to these emission units.~~the facility.~~

n. **40 C.F.R. 60 Subpart YYYY – *Turbine MACT*** – The Solar Turbine which was installed in 1966 was constructed prior to the January 14, 2003 compliance date, and is therefore considered an exempt existing source in accordance with §63.6090(b)(4).

o. **40 C.F.R. Part 64 – Compliance Assurance Monitoring (CAM)** – ~~There are no add-on controls at this facility, with the exception of the DEG dehys, which~~ The DEG dehydrators are subject to 40 C.F.R. 63, Subpart HHH; therefore, in accordance with 40 C.F.R. §64.2(b)(1)(i), CAM is not applicable to HAPs emitted from these sources. Moreover, the DEG Dehys are not subject to any other non-exempt pollutant limitation (such as VOC or PM), thereby not meeting the applicability criterion in §64.2(a)(1). Based upon these facts, CAM does not apply to any source at the facility.

Emissions of carbon monoxide, volatile organic compounds, and formaldehyde from the engine 08108 are controlled by an oxidation catalyst. However, 08108 is subject to the standards of 40 C.F.R. 60, Subpart JJJJ and 40 C.F.R. 63, Subpart ZZZZ and, therefore, is exempt from CAM in accordance with 40 C.F.R. §64.2(b)(1)(i).

4.0. Miscellaneous Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr [emission unitpoint ID(s): BLR5, BLR6, BLR7, BLR4, HTR2, HTR3]

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, R13-2149, 6.1.1.] (BLR5, BLR6, BLR7, HTR3)

4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2.]
[45CSR13, R13-2149, 6.1.2.] (BLR5, BLR6, BLR7, HTR3)

4.1.3. **Maximum Design Heat Input**. The maximum design heat input for each of the DEG Dehydrator Reboilers (BLR5, BLR6, BLR7) shall not exceed 0.55 MMBtu/hr.
[45CSR13, R13-2149, 6.1.3.]

4.1.4. Maximum emissions from each of the 0.55 MMBtu/hr NATCO DEG Dehydrator Reboilers (BLR5, BLR6, BLR7) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.07	0.29
Carbon Monoxide	0.06	0.24

[45CSR13, R13-2149, 6.1.4.]

4.1.5. **Maximum Design Heat Input.** The maximum design heat input for the line heater (HTR3) shall not exceed 1.615 MMBtu/hr.
[45CSR13, R13-2149, 6.1.4.]

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 60 Appendix A.
[45CSR13, R13-2149, 6.2.1.; 45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. Reserved.

4.4. Recordkeeping Requirements

4.4.1. Reserved.

4.5. Reporting Requirements

4.5.1. Reserved.

4.6. Compliance Plan

4.6.1. Reserved.

5.0. 40 C.F.R. 63, Subpart ZZZZ MACT Requirements [emission unit ID: 081G3, 081G4, 08108]

5.1. Limitations and Standards

5.1.1. As stated in §63.6602, you must comply with the following requirements for existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

For each . . .	The permittee must meet the following requirements, except during periods of startup . . .	During periods of startup you must…
Emergency stationary SI RICE and black start stationary SI RICE[1]	Change oil and filter every 500 hours of operation or annually, whichever comes first;[2]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
	Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;	
	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[2] Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(j) (permit condition 5.2.4.) in order to extend the specified oil change requirement in Table 2c of this subpart.

[3] Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

[40 C.F.R. §63.6602, Table 2c, Item 6; 45CSR34] (081G3)

5.1.2. (b) Stationary RICE subject to limited requirements.

(1) An affected source which meets the criteria in paragraph (b)(1)(i) of this condition does not have to meet the requirements of 40 C.F.R. Part 63 Subparts A and ZZZZ except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

[40 C.F.R. §§63.6590(b), (b)(1), and (b)(1)(i); 45CSR34] (081G4)

5.1.3. Compliance with the numerical emission limitations established in 40 C.F.R. Part 63 Subpart ZZZZ is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 40 C.F.R. §63.6620 and Table 4 to Subpart ZZZZ of Part 63.

(b) If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, you must comply with the emission limitations in Table 2a to Subpart ZZZZ of Part 63 and the operating limitations in Table 2b to Subpart ZZZZ of Part 63 which apply to you.

Table 2a to Subpart ZZZZ of Part 63 – Emission Limitations for New 4SLB Stationary RICE ≥ 250 HP Located at a Major Source of HAP Emissions

For each . . .	The permittee must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	

[1] Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

Table 2b to Subpart ZZZZ of Part 63 – Operating Limitations for New 4SLB Stationary RICE ≥ 250 HP Located at a Major Source of HAP Emissions

For each . . .	During periods of startup you must . . .
1. New and reconstructed 4SLB stationary RICE ≥ 250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 4SLB stationary RICE ≥ 250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1,350°F.[1]

[1] Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.8(f) for a different temperature range.

[40 C.F.R. §63.6600(b); Table 2a to Subpart ZZZZ of Part 63, Item 2.; Table 2b to Subpart ZZZZ of Part 63, Item 1.; 45CSR34; 45CSR13, R13-2149, 9.1.2.] (08108)

5.1.4.~~2.~~ a. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013. **(081G3)**

b. If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in 40 C.F.R. Part 63 Subpart ZZZZ upon startup of your affected source.
[45CSR13, R13-2149, 9.1.1.] (08108)

[40 C.F.R. §§63.6595(a)(1) and (a)(3); 45CSR34]

5.1.5.~~3.~~ The permittee shall comply with the following general requirements:

a. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 C.F.R. 63 Subpart ZZZZ that apply to the permittee at all times.

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

[40 C.F.R. §§ 63.6605(a) and (b); 45CSR34; 45CSR13, R13-2149, 9.1.7.] (081G3, 081G4, 08108)

5.1.6.~~4.~~ If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (1) through (3) of this condition. In order for the engine to be considered an emergency stationary RICE under 40 C.F.R. 63 Subpart ZZZZ, 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 paragraphs (1) through (3) of this condition, is prohibited. If you do not operate the engine according to the requirements in paragraphs (1) through (3) of this condition, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for ~~any combination of~~ the purpose~~s~~ specified in paragraph (2)(i) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (2).

(i) Emergency stationary RICE 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 RICE beyond 100 hours per calendar year.

(3) Emergency stationary RICE located at major sources of HAP 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 ~~and emergency demand response~~ provided in paragraph (f)(2) of this section. 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 supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 63.6640(f), (f)(1), (f)(2), and (f)(3); 45CSR34] (081G3, 081G4)

5.1.7.5. The permittee shall comply with all General Provisions which apply according to Table 8 to 40 C.F.R., Part 63, Subpart ZZZZ.
[40 C.F.R. §63.6665; 45CSR34]

5.2. Monitoring Requirements

5.2.1. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 to Subpart ZZZZ of Part 63 (permit condition 5.2.6.), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (1) through (6) of this condition.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (1)(i) through (1)(v) of this condition and in 40 C.F.R. §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (1) through (5) of this condition in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §§63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §§63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635 (permit condition 5.2.7.)).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

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

[40 C.F.R. §63.6625(b); 45CSR34] (08108)

5.2.2.1. If you own or operate an existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE 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.

You must demonstrate continuous compliance with each work or management practice in Item 6 of Table 2c to 40 C.F.R. 63 Subpart ZZZZ by complying with the paragraph above according to Item 9 in Table 6 to this subpart.

[40 C.F.R. §§63.6625(e) and (e)(2); 40 C.F.R. §63.6640(a), Table 6, Item 9; 45CSR34] (081G3)

5.2.3.~~2.~~ If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
[40 C.F.R. §63.6625(f); 45CSR34] (081G3)

5.2.4.~~3.~~ If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to Subpart ZZZZ of Part 63 apply.
[40 C.F.R. §63.6625(h); 45CSR34; 45CSR13, R13-2149, 9.1.5.] (081G3, 08108)

5.2.5.~~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 2c to 40 C.F.R. 63 Subpart ZZZZ, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c 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.
[40 C.F.R. §63.6625(j); 45CSR34] (081G3)

5.2.6. (a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 to Subpart ZZZZ of Part 63.

(b) During the initial performance test, you must establish each operating limitation in Table 2b to Subpart ZZZZ of Part 63 (permit condition 5.1.3.) that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. §63.6645 (permit conditions 5.5.2. and 5.5.3.).

Table 5 to Subpart ZZZZ of Part 63 – Initial Compliance with Emission Limitations, Operating Limitations, and other Requirements

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b) (permit condition 5.2.1.); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
9. New or reconstructed non-emergency stationary RICE ≥ 500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b) (permit condition 5.2.1.); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

[40 C.F.R. §§63.6630(a) to (c); Table 5 to Subpart ZZZZ of Part 63, Items 1. and 9.; 45CSR34; 45CSR13, R13-2149, 9.1.6.] (08108)

5.2.7. (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this condition.

(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 valid data collected during all other periods.

[40 C.F.R. §63.6635; 45CSR34; 45CSR13, R13-2149, 9.1.8.] (08108)

5.2.8. You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 2a and 2b to Subpart ZZZZ of Part 63 that apply to you according to the methods specified in Table 6 to Subpart ZZZZ of Part 63.

Table 6 to Subpart ZZZZ of Part 63 – Continuous Compliance With Emission Limitations, and Other Requirements

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. New or reconstructed non-emergency 4SLB stationary RICE ≥ 250 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[a]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b) (permit condition 5.2.1.); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
7. New or reconstructed non-emergency stationary RICE > 500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b) (permit condition 5.2.1.); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

[a] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[40 C.F.R. §63.6640(a); Table 6 to Subpart ZZZZ of Part 63, Items 1. and 7.; 45CSR34; 45CSR13, R13-2149, 9.1.9.(a)] (08108)

5.3. Testing Requirements

5.3.1. ~~Reserved.~~If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you are subject to the requirements of this condition.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to 40 C.F.R. Part 63 Subpart ZZZZ (permit condition 5.3.3.) that apply to you within 180 days after the compliance date that is specified for your stationary RICE in 40 C.F.R. §63.6595 and according to the provisions in 40 C.F.R. §63.7(a)(2).

[40 C.F.R. §63.6610(a); 45CSR34; 45CSR13, R13-2149, 9.1.3.] (08108)

5.3.2. If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 to Subpart ZZZZ of Part 63 (permit condition 5.3.3.).
[40 C.F.R. §63.6615; 45CSR34; 45CSR13, R13-2149, 9.1.4.] (08108)

5.3.3. (a) You must conduct each performance test in Table 3 and Table 4 to Subpart ZZZZ of Part 63 that applies to you.

Table 3 to Subpart ZZZZ of Part 63

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 4SLB stationary RICE ≥ 250 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE > 500 HP located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]

[1] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[40 C.F.R. §63.6620(a); Table 3 to Subpart ZZZZ of Part 63, Items 1. and 3.]

Table 4 to Subpart ZZZZ of Part 63 – Requirements for Performance Tests

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 4SLB stationary RICE	a. Reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of section 11.1.1 of Method 1 of 40 C.F.R. Part 60, Appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to section 8.1.2 of Method 7E of 40 C.F.R. Part 60, Appendix A-4.
		ii. Measure the O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 C.F.R. Part 60, Appendix A-2, or ASTM D6522-00 (Reapproved 2005)[1,3] (heated probe not necessary)	(b) Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device; and	(2) ASTM D6522-00 (Reapproved 2005)[1,2,3] (heated probe not necessary) or Method 10 of 40 C.F.R. Part 60, Appendix A-4	(c) The CO concentration must be at 15 percent O_2, dry basis.
		iv. Measure moisture content at the inlet and outlet of the control device as needed to determine CO and O_2 concentrations on a dry basis.	(3) Method 4 of 40 C.F.R. Part 60, Appendix A-3, or Method 320 of 40 C.F.R. Part 63, Appendix A, or ASTM D6348-03[1,3]	(d) Measurements to determine moisture content must be made at the same time and location as the measurements for CO concentration.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust at the exhaust of the stationary RICE; and		(a) For formaldehyde, CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of section 11.1.1 of Method 1 of 40 C.F.R. Part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to section 8.1.2 of Method 7E of 40 C.F.R. Part 60, Appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 C.F.R. Part 60, Appendix A-2, or ASTM D6522-00 (Reapproved 2005)[1,3] (heated probe not necessary)	(b) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location as needed to determine formaldehyde or CO and O_2 concentrations on a dry basis; and	(2) Method 4 of 40 C.F.R. Part 60, Appendix A-3, or Method 320 of 40 C.F.R. Part 63, Appendix A, or ASTM D6348-03[1,3]	(c) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE	(3) Method 320 or 323 of 40 C.F.R. Part 63, Appendix A; or ASTM D6348-03,[1,3] provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(d) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		v. Measure CO at the exhaust of the stationary RICE	(4) Method 10 of 40 C.F.R. Part 60, Appendix A-4, ASTM D6522-00 (2005),[1,3] Method 320 of 40 C.F.R. Part 63, Appendix A, or ASTM D6348-03[1,3]	(e) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[1] You may also use methods 3A and 10 as options to ASTM-D6522-00 (2005).
[2] You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor MI 48106.
[3] Incorporated by reference, see 40 C.F.R. §63.14.

[40 C.F.R. §63.6620(a); Table 4 to Subpart ZZZZ of Part 63, Items 1. and 3.]

(b) Each performance test must be conducted according to the requirements specified in Table 4 to Subpart ZZZZ. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraph (b)(2) of this condition.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

[40 C.F.R. §§63.6620(b) and (b)(2)]

(d) You must conduct three separate test runs for each performance test required in this condition, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in Subpart ZZZZ.
[40 C.F.R. §63.6620(d)]

(e) (1) You must use Equation 1 of this condition to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{Eq. 1}$$

Where:
C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet;
C_o = concentration of CO, THC, or formaldehyde at the control device outlet; and
R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed.

Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this condition.

(i) Calculate the fuel-specific F_O value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_O = \frac{0.209\, F_d}{F_c} \quad \text{Eq. 2}$$

Where:
F_O = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air;
0.209 = Fraction of air that is oxygen, percent/100;
F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ BTU); and
F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ BTU).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO2} = \frac{5.9}{F_O} \quad \text{Eq. 3}$$

Where:
X_{CO2} = CO_2 correction factor, percent; and
5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad \text{Eq. 4}$$

Where:
C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2;
C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected;
X_{CO2} = CO_2 correction factor, percent; and
$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

[40 C.F.R. §63.6620(e)]

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

gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.
[40 C.F.R. §63.6620(i)]

[40 C.F.R. §63.6620; Table 3 to Subpart ZZZZ of Part 63, Items 1. and 3.; Table 4 to Subpart ZZZZ of Part 63, Items 1. and 3.; 45CSR34] (08108)

5.4. Recordkeeping Requirements

5.4.1. (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5) and (b)(1) through (b)(3) of this condition.

(1) A copy of each notification and report that you submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 C.F.R. §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §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.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (b)(3) of this condition.

(1) Records described in §§63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(d) You must keep the records required in Table 6 to Subpart ZZZZ of Part 63 (permit condition 5.2.8.) to show continuous compliance with each emission or operating limitation that applies to you.

[40 C.F.R. §§63.6655(a), (b), and (d); Table 6 to Subpart ZZZZ of Part 63, Items 1. and 7.; 45CSR34; 45CSR13, R13-2149, 9.1.11.] (08108)

5.4.2.~~1.~~ You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate an existing stationary emergency RICE.
[40 C.F.R. §§63.6655(e) and (e)(2); 45CSR34] (081G3)

5.4.3.~~2.~~ If you own or operate existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines, you 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. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
[40 C.F.R. §§63.6655(f) and (f)(1); 45CSR34] (081G3)

5.4.4.~~3.~~ **Format and Retention of 40 C.F.R. 63 Subpart ZZZZ Records**.

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[40 C.F.R. §63.6660; 45CSR34] (081G3, 08108)

5.5. Reporting Requirements

5.5.1. (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 2a and 2b to Subpart ZZZZ of Part 63 that apply to you. These instances are deviations from the emission and operating limitations in Subpart ZZZZ. These deviations must be reported according to the requirements in §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. **(08108)**

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 C.F.R. §94.11(a). **(08108)**

(e) You must also report each instance in which you did not meet the requirements in Table 8 to 40 C.F.R. 63 Subpart ZZZZ that apply to you. **(081G3, 08108)**

[40 C.F.R. §§63.6640(b), (d), and (e); 45CSR34; 45CSR13, R13-2149, 9.1.9.(b), (d), and (e)]

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

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to Subpart ZZZZ.

(g) 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 §63.7(b)(1).

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

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

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

[40 C.F.R. §§63.6645(a), (a)(4), (c), (g), and (h); 45CSR34; 45CSR13, R13-2149, 9.1.10.(a), (c), (g), and (h)] (08108)

5.5.3. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of 40 C.F.R. Part 63 Subpart ZZZZ, in accordance with §63.6590(b), your notification should include the information in §§63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). **[40 C.F.R. §63.6645(f); 45CSR34; 45CSR13, R13-2149, 9.1.10.(f)] (081G4)**

5.5.4. (a) You must submit each report in Table 7 to Subpart ZZZZ of Part 63 that applies to you.

Table 7 to Subpart ZZZZ of Part 63 – Requirements for Reports

For each…	You must submit a…	The report must contain…	You must submit the report…
1. New or reconstructed non-emergency stationary RICE > 500 HP located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §§63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and
			ii. Annually according to the requirements in §§63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.

For each…	You must submit a…	The report must contain…	You must submit the report…
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 to Subpart ZZZZ of Part 63 and according to the requirements in paragraphs (b)(1) through (b)(9) of this condition.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §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 §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 C.F.R. Part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §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 paragraphs (b)(1) through (b)(4) of this condition.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (c)(6) of this condition.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) 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 Subpart ZZZZ, the Compliance report must contain the information in paragraphs (c)(1) through (c)(4) of this condition and the information in paragraphs (d)(1) and (d)(2) of this condition.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) 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 Subpart ZZZZ, you must include information in paragraphs (c)(1) through (c)(4) and (e)(1) through (e)(12) of this condition.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

~~5.5.2.~~ (f) The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by ~~permit condition 3.5.6.~~ 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 to Subpart ZZZZ of Part 63 along with, or as part of, the semiannual monitoring report required by 40 C.F.R. §70.6(a)(3)(iii)(A) or 40 C.F.R. §71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

[40 C.F.R. §§63.6650(a) through (f); Table 7 to Subpart ZZZZ of Part 63, Item 1.; 45CSR34; 45CSR13, R13-2149, 9.1.12.] (08108)

~~5.5.3. If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.~~

~~(1) The report must contain the following information:~~

~~(i) Company name and address where the engine is located.~~

~~(ii) Date of the report and beginning and ending dates of the reporting period.~~

~~(iii) Engine site rating and model year.~~

~~(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.~~

~~(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).~~

~~(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).~~

~~(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.~~

~~(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.~~

~~(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.~~

~~(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.~~

~~(3) 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 § 63.13.~~

~~[40 C.F.R. §63.6650(h); 45CSR34]~~

5.6. Compliance Plan

5.6.1. Reserved.

6.0 40 C.F.R. 63, Subpart DDDDD MACT Requirements [emission unit IDs: BLR4, HTR2, HTR3]

6.1. Limitations and Standards

6.1.1. The heaters (HTR2, HTR3) and the boiler (BLR4) shall only burn natural gas (fuel subcategory: gas 1). **[45CSR13, R13-2149, 11.1.1.]**

6.1.2.~~1.~~ **Compliance Date.**

a. If you have a new or reconstructed boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD upon startup of your boiler or process heater. **(HTR3)**

b. If you have an existing boiler or process heater, you must comply with 40 C.F.R. 63 Subpart DDDDD no later than January 31, 2016, except as provided in §63.6(i). **(BLR4, HTR2)**

[40 C.F.R. §§63.7495(a) and (b); 45CSR34]

6.1.3.~~2.~~ **Initial and Periodic Tune-ups.** If your unit is a new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in the unit designed to burn gas 1 subcategory, you must conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540(a)(10)(i) through (vi) (paragraphs (i) through (vi) of this condition) to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown).

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) and (B) of this condition.

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up.

- ~~Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.~~

- ~~If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.~~

[40 C.F.R. §§ 63.7500(a), Table 3 – Work Practice Standards, Item #1; 40 C.F.R. §63.7500(e); 40 C.F.R. §§ 63.7540(a)(12), 63.7540(a)(10)(i) through (vi), ~~63.7515(d), 63.7540(a)(13), 63.7515(g),~~ 63.7505(a); 45CSR34; 45CSR13, R13-2149, 11.1.2. and 11.1.3.]

6.1.4. If you are required to meet an applicable tune-up work practice standard, the permittee must conduct a 5-year performance tune-up according to 40 C.F.R. §63.7540(a)(12) (permit condition 6.1.3.). Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in 40 C.F.R. §63.7490), the first 5-year tune-up must be no later than 61 months after the initial startup of the new or reconstructed affected source.
[40 C.F.R. §§63.7510(g) and 63.7515(d); 45CSR34; 45CSR13, R13-2149, 11.2.1.]

6.1.5. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
[40 C.F.R. §§63.7515(g), 63.7540(a)(13); 45CSR34; 45CSR13, R13-2149, 11.1.5.]

6.1.6.~~3.~~ At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 C.F.R. §63.7500(a)(3); 45CSR34]

6.2. Monitoring Requirements

6.2.1. Reserved.

6.3. Testing Requirements

6.3.1. Reserved.

6.4. Recordkeeping Requirements

6.4.1. You must keep records according to paragraphs (1) and (2) of this condition.

(1) A copy of each notification and report that you submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual* compliance report that you submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

** Note – Compliance reports are required once every 5 years for BLR4, ~~and~~ HTR2, and HTR3 pursuant to 40 C.F.R. §63.7550(b) in permit condition 6.5.2.*

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 C.F.R. §63.10(b)(2)(viii).

[40 C.F.R. §§63.7555(a)(1) and (a)(2); 45CSR34; 45CSR13, R13-2149, 11.3.1.]

6.4.2. Format and Retention of Records for 40 C.F.R. 63 Subpart DDDDD.

(a) Your records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.§10(b)(1).

(b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). You can keep the records off site for the remaining 3 years.

[40 C.F.R. §§63.7560(a), (b), and (c); 45CSR34; 45CSR13, R13-2149, 11.3.2.]

6.5. Reporting Requirements

6.5.1. You must report each instance in which you did not meet the work practice standard in Table 3 to Subpart DDDDD (permit condition 6.1.2.). These instances are deviations from the work practice standards, in this subpart. These deviations must be reported according to the requirements in §63.7550 (permit condition 6.5.2.).
[40 C.F.R. §63.7540(b); 45CSR34]

6.5.2. You must submit a Compliance report for 40 C.F.R. 63 Subpart DDDDD containing:

a. The information in §63.7550(c)(5)(i) through (iii), (xiv), and (xvii) which is:

(i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 C.F.R. §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xvii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

b. If there are no deviations from the requirements for work practice standards in Table 3 to 40 C.F.R. 63 Subpart DDDDD that apply to you (condition 6.1.2), a statement that there were no deviations from the work practice standards during the reporting period.

You must submit the report every 5 years according to the requirements in 40 C.F.R. §63.7550(b), which are:

(1) The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 C.F.R. §63.7495 and ending on December 31 within 5 years after the compliance date that is specified for your source in 40 C.F.R. §63.7495.

(2) The first 5-year compliance report must be postmarked or submitted no later than January 31.

(3) Each subsequent 5-year compliance report must cover the 5-year periods from January 1 to December 31.

(4) Each subsequent 5-year compliance report must be postmarked or submitted no later than January 31.

(5) You may submit the first and subsequent compliance reports according to the dates established in permit condition 3.5.6. instead of according to the dates in paragraphs (1) through (4) of this condition.

You must submit all reports required by Table 9 of 40 C.F.R. 63 Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[40 C.F.R. §63.7550(a), Table 9, Items # 1.a. and # 1.b.; 40 C.F.R. §§63.7550(b), (c)(1), and (c)(5)(i) through (iii), (xiv), and (xvii); 40 C.F.R. §63.7550(h)(3); 45CSR34; 45CSR13, R13-2149, 11.4.3.]

6.5.3. a. You must submit to the Administrator all of the notifications in 40 C.F.R. §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

b. As specified in 40 C.F.R. §§63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. For a new or reconstructed affected source that has reclassified to major source status, you must submit an Initial Notification not later 120 days after the source becomes subject to 40 C.F.R. Part 63 Subpart DDDDD.

[40 C.F.R. §§63.7545(a) and (c); 45CSR34; 45CSR13, R13-2149, 11.4.1.]

6.5.4. If you are required to conduct an initial compliance demonstration as specified in 40 C.F.R. §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of §63.7545, as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of

Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) of §63.7545 and must be submitted within 60 days of the compliance date specified at §63.7495(b).

(e)(1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 C.F.R. Part 63 Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under 40 C.F.R. §241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3, and justification for the selection of fuel(s) burned during the compliance demonstration.

(e)(8) In addition to the information required in 40 C.F.R. §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 C.F.R. Part 63 Subpart DDDDD at this site according to the procedures in §§63.7540(a)(10)(i) through (vi)."

(ii) "This facility has had an energy assessment performed according to §63.7530(e)."

(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."

[40 C.F.R. §§63.7545(e), (e)(1), and (e)(8); 45CSR34; 45CSR13, R13-2149, 11.4.2.]

6.6. Compliance Plan

6.6.1. Reserved.

7.0 40 C.F.R. 63, Subpart HHH MACT Requirements [emission unit IDs: DEG-DEHY1, DEG-DEHY2, DEG-DEHY3, FLLP2FLLP1]

7.1. Limitations and Standards

7.1.1. **Compliance Date.** The owner or operator of each affected source shall achieve compliance with the provisions of this subpart by the following dates:

(1) Except as specified in paragraphs (d)(3) through (4) of this section, the owner or operator of an affected source, the construction or reconstruction of which commenced before February 6, 1998, shall achieve compliance with this provisions of the subpart no later than June 17, 2002 except as provided for in §63.6(i).

[40 C.F.R. §63.1270(d)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.1.1.2. **Affirmative Defense.** In response to an action to enforce the standards set forth in this subpart, you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed; however, if you fail to meet your burden of proving all of the requirements in the affirmative defense, the affirmative defense shall not be available for claims for injunctive relief.
[40 C.F.R. §63.1272(d); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.1.3. **Repair of Leaks.** In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this standard to fail to take action to repair the leak(s) within the specified time. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of this standard. However, if the repairs are unsuccessful, and a leak is detected, the owner or operator shall take further action as required by the applicable provisions of this subpart.
[40 C.F.R. §63.1274(g); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.1.2.4. **Good Air Pollution Control Practices**. At all times the owner or operator 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 C.F.R. §63.1274(h); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.1.3. 40 C.F.R. Part 63 Subpart HHH applies to owners and operators of natural gas transmission and storage facilities that transport and store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. Emissions for major source determination purposes can be estimated using the maximum natural gas throughput calculated in paragraph (1) of this condition and paragraphs (3) and (4) of this condition. As an alternative to calculating the maximum natural gas throughput, the owner or operator of a new or existing source may use the facility design maximum natural gas throughput to estimate the maximum potential emissions. Other means to determine the facility's major source status are allowed, provided the information is documented and recorded to the Administrator's satisfaction in accordance with §63.10(b)(3). A compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage source category. A facility that is determined to be an area source, but subsequently increases

its emissions or its potential to emit above the major source levels (without obtaining and complying with other limitations that keep its potential to emit HAP below major source levels), and becomes a major source, must comply with all applicable provisions of Subpart HHH starting on the applicable compliance date specified in paragraph (d) of §63.1270. Nothing in this paragraph is intended to preclude a source from limiting its potential to emit through other appropriate mechanisms that may be available through the permitting authority.

(1) Facilities that store natural gas or facilities that transport and store natural gas shall calculate the maximum annual facility natural gas throughput using the following equation:

$$Throughput = \frac{8{,}760}{\left(\frac{1}{IR_{max}} + \frac{1}{WR_{max}}\right)}$$

Where:
Throughput = Maximum annual facility-wide natural gas throughput in cubic meters per year.
IR_{max} = Maximum facility injection rate in cubic meters per hour.
WR_{max} = Maximum facility withdrawal rate in cubic meters per hour.
8,760 = Maximum hours of operation per year.

(3) The owner or operator shall maintain records of the annual facility natural gas throughput each year and upon request, submit such records to the Administrator. If the facility annual natural gas throughput increases above the maximum natural gas throughput calculated in paragraph (1) of this condition, the maximum natural gas throughput must be recalculated using the higher throughput multiplied by a factor of 1.2.

(4) The owner or operator shall determine the maximum values for other parameters used to calculate potential emissions as the maximum over the same period for which maximum throughput is determined as specified in paragraph (1) of this condition. These parameters shall be based on an annual average or the highest single measured value. For estimating maximum potential emissions from glycol dehydration units, the glycol circulation rate used in the calculation shall be the unit's maximum rate under its physical and operational design consistent with the definition of potential to emit in §63.2.

[40 C.F.R. §§63.1270(a), (a)(1), (a)(3), and (a)(4); 45CSR34; 45CSR13, R13-2149, 7.1.3. through 7.1.7.]

~~7.1.5. The owner or operator of a large glycol dehydration unit shall connect the process vent to a control device or a combination of control devices through a closed vent system and the outlet benzene emissions from the control device(s) shall be less than 0.90 megagrams per year. The closed vent system shall be designed and operated in accordance with the requirements of §63.1281(c). The control device(s) shall be designed and operated in accordance with the requirements of §63.1281(d), except that the performance requirements specified in §63.1281(d)(1)(i) and (ii) do not apply.~~
~~[40 C.F.R. §§ 63.1275(b)(1)(ii) and 63.1274(c)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]~~

7.1.4. (1) For each glycol dehydration unit process vent, the owner or operator shall control air emissions as follows:

(iii) You must limit BTEX emissions from each existing small glycol dehydration unit, as defined in §63.1271, to the limit determined in Equation 1 of this condition. The limits determined using Equation 1 must be met in accordance with (1)(iii)(D).

$$EL_{BTEX} = 3.10 \times 10^{-4} \times Throughput \times C_{i,BTEX} \times 365 \frac{days}{yr} \times \frac{1\,Mg}{1 \times 10^{6}\,grams} \quad \text{Eq. 1}$$

Where:
EL_{BTEX} = Unit-specific BTEX emission limit, megagrams per year;
3.10×10^{-4} = BTEX emission limit, grams BTEX/standard cubic meter-ppmv;
Throughput = Annual average daily natural gas throughput, standard cubic meters per day;
$C_{i,BTEX}$ = Annual average BTEX concentration of the natural gas at the inlet to the glycol dehydration unit, ppmv.

(D) Demonstrate that the emissions limit is met through actual uncontrolled operation of the small glycol dehydration unit. Document operational parameters in accordance with the requirements specified in §63.1281(e) and emissions in accordance with the requirements specified in §63.1282(a)(2).

[40 C.F.R. §§ 63.1275(b)(1), (b)(1)(iii), and (b)(1)(iii)(D); 45CSR34 and 45CSR13, R13-2149, 7.1.3 and 7.1.8]

~~7.1.6. One or more safety devices that vent directly to the atmosphere may be used on the air emission control equipment installed to comply with paragraph (b)(1) of §63.1275 (permit condition 7.1.5.).~~
~~**[40 C.F.R. §§ 63.1275(b)(2) and 63.1274(c)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

~~7.1.7. As an alternative to the requirements of paragraph (b) of §63.1275, the owner or operator may comply with one of the following:~~

~~(3) Control of HAP emissions from a GCG separator (flash tank) vent is not required if the owner or operator demonstrates, to the Administrator's satisfaction, that total emissions to the atmosphere from the glycol dehydration unit process vent are reduced by one of the levels specified in paragraph (c)(3)(i) through (iv) through the installation and operation of controls as specified in paragraph (b)(1) of this section.~~

~~(ii) For any large glycol dehydration unit, benzene emissions are reduced to a level less than~~

~~**[40 C.F.R. §§ 63.1275(c), (c)(3), (c)(3)(ii), and 63.1274(c)(1); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

~~7.1.8. **Closed vent system requirements**.~~

~~(1) The closed vent system shall route all gases, vapors, and fumes emitted from the material in an emissions unit to a control device that meets the requirements specified in paragraph (d) of §63.1281 (permit condition 7.1.9.).~~

~~(2) The closed vent system shall be designed and operated with no detectable emissions.~~

~~(3) If the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device, the owner or operator shall meet the requirements specified in paragraphs (3)(i) and (3)(ii) of this condition.~~

~~(i) For each bypass device, except as provided for in paragraph (3)(ii) of this section, the owner or operator shall either:~~

~~(A) At the inlet to the bypass device that could divert the stream away from the control device to the atmosphere, properly install, calibrate, maintain, and operate a flow indicator that is capable of taking periodic readings and sounding an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the control device to the atmosphere; or~~

~~(B) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.~~

~~(ii) Low-leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph (3)(i) of this condition.~~

~~**[40 C.F.R. §63.1281(c); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

~~7.1.9. The control device used to reduce HAP emissions in accordance with the standards of this 40 C.F.R. 63 Subpart HHH shall be the control device specified in paragraph (iii) of this condition.~~

~~(i) A flare, as defined in §63.1271, that is designed and operated in accordance with the requirements of §63.11(b).~~

~~**[40 C.F.R. §§ 63.1281(d), (d)(1), and (d)(1)(iii); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

~~7.1.10. Each control device used to comply with 40 C.F.R. 63 Subpart HHH shall be operating at all times when gases, vapors, and fumes are vented from the emissions unit or units through the closed vent system to the control device as required under §63.1275. An owner or operator may vent more than one unit to a control device used to comply with this subpart.~~
~~**[40 C.F.R. §§ 63.1281(d)(4) and (d)(4)(i); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

7.2. Monitoring Requirements

7.2.1. The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (i) or (ii) of this condition. Emissions shall be determined either uncontrolled or with federally enforceable controls in place.

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

(ii) The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR part 60, appendix A; or ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in §63.14), as specified in §63.772(a)(1)(ii); or an equivalent method; and averaging the results of the three runs. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

[40 C.F.R. §63.1282(a)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.2.2. The owner or operator shall determine glycol dehydration unit baseline operations (as defined in 40 C.F.R. §63.1271). Records of glycol dehydration unit baseline operations shall be retained as required under 40 C.F.R. §63.1284(b)(9).
[40 C.F.R. §63.1281(e)(1); 45CSR34 and 45CSR13 R13-2149, 7.1.3.]

~~7.2.2. (c) *Closed vent system inspection and monitoring requirements.*~~

~~(1) For each closed vent system required to comply with this section, the owner or operator shall comply with the requirements of paragraphs (c)(2) through (7) of this section.~~

~~(2) Except as provided in paragraphs (c)(5) and (6) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (c)(2)(i) and (ii) of this section and each bypass device shall be inspected according to the procedures of (c)(2)(iii) of this section.~~
~~(i) For each closed vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange), the owner or operator shall:~~

~~(A) Conduct an initial inspection according to the procedures specified in §63.1282(b) to demonstrate that the closed vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in §63.1285(d)(1) or (2).~~

~~(B) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices. The owner or operator shall monitor a component or connection using the procedures specified in §63.1282(b) to demonstrate that it operates with no detectable emissions following any time the component or connection is repaired or replaced or the connection is unsealed. Inspection results shall be submitted in the Periodic Report as specified in §63.1285(e)(2)(iii).~~

~~(ii) For closed vent system components other than those specified in paragraph (c)(2)(i) of this section, the owner or operator shall:~~

~~(A) Conduct an initial inspection according to the procedures specified in §63.1282(b) to demonstrate that the closed vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in §63.1285(d)(1) or (2).~~

~~(B) Conduct annual inspections according to the procedures specified in §63.1282(b) to demonstrate that the components or connections operate with no detectable emissions. Inspection results shall be submitted in the Periodic Report as specified in §63.1285(e)(2)(iii).~~

~~(C) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices. Inspection results shall be submitted in the Periodic Report as specified in §63.1285(e)(2)(iii).~~

~~(iii) For each bypass device, except as provided for in §63.1281(c)(3)(ii), the owner or operator shall either:~~

(A) At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or

(B) If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.

(3) In the event that a leak or defect is detected, the owner or operator shall repair the leak or defect as soon as practicable, except as provided in paragraph (c)(4) of this section.

(i) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
(ii) Repair shall be completed no later than 15 calendar days after the leak is detected.

(4) Delay of repair of a closed vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in §63.1271, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next shutdown.

(5) Any parts of the closed vent system or cover that are designated, as described in paragraphs (c)(5) (i) and (ii) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (c)(2) (i) and (ii) of this section if:

(i) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraph (c)(2) (i) or (ii) of this section; and

(ii) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(6) Any parts of the closed vent system or cover that are designated, as described in paragraphs (c)(6) (i) and (ii) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (c)(2) (i) and (ii) of this section if:

(i) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(ii) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years.

(7) Records shall be maintained as specified in §63.1284(b)(5) through (8).

[40 C.F.R. §§63.1283(c) and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.2.3. *Control device monitoring requirements.*

(1) For each control device except as provided for in paragraph (d)(2) of §63.1283, the owner or operator shall install and operate a continuous parameter monitoring system in accordance with the requirements

~~of paragraphs (3), (6), and (7) of this condition. Owners or operators that install and operate a flare in accordance with §63.1281(d)(1)(iii) or (f)(1)(iii) are exempt from the requirements of paragraphs (d)(4) and (5) of §63.1283. The continuous monitoring system shall be designed and operated so that a determination can be made on whether the control device is achieving the applicable performance requirements of §63.1281(d). Each continuous parameter monitoring system shall meet the following specifications and requirements:~~

~~(i) Each continuous parameter monitoring system shall measure data values at least once every hour and record either:~~

~~(A) Each measured data value; or~~

~~(B) Each block average value for each 1 hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.~~

~~(ii) A site specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraph (d) of this section and in §63.8(d). Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in your approved site specific monitoring plan. Using the process described in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (1)(ii)(A) through (E) of this condition in your site specific monitoring plan.~~

~~(A) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;~~

~~(B) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;~~

~~(C) Equipment performance checks, system accuracy audits, or other audit procedures;~~

~~(D) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1) and (c)(3); and~~

~~(E) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).~~

~~(iii) The owner or operator must conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site specific monitoring plan at least once every 12 months.~~

~~(iv) The owner or operator must conduct a performance evaluation of each CPMS in accordance with the site specific monitoring plan.~~

~~[40 C.F.R. §§ 63.1283(d), (d)(1), and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]~~

7.2.4. The owner or operator shall install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified in either paragraph (i) of this condition.

(i) A continuous monitoring system that measures the following operating parameters as applicable:

(C) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

[40 C.F.R. §§63.1283(d)(3)(i)(C) and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.2.5. An excursion for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (6)(i) through (6)(iv) of this condition being met. When multiple operating parameters are monitored for the same control device and during the same operating day, and more than one of these operating parameters meets an excursion criterion specified in paragraphs (6)(i) through (6)(iv) of this condition, then a single excursion is determined to have occurred for the control device for that operating day.

(iii) An excursion occurs when the monitoring data are not available for at least 75 percent of the operating hours in a day.

(iv) If the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device, an excursion occurs when:

(A) For each bypass line subject to §63.1281(c)(3)(i)(A) (permit condition 7.1.8.) the flow indicator indicates that flow has been detected and that the stream has been diverted away from the control device to the atmosphere.

(B) For each bypass line subject to §63.1281(c)(3)(i)(B) (permit condition 7.1.8.), if the seal or closure mechanism has been broken, the bypass line valve position has changed, the key for the lock-and-key type lock has been checked out, or the car-seal has broken.

For each excursion, the owner or operator shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard.

[40 C.F.R. §§ 63.1283(d)(6), (d)(6)(iii), (d)(6)(iv), 63.1283(d)(7), and 63.1274(c)(2); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.3. Testing Requirements

7.3.1. Reserved.~~*Control device performance test procedures.* This paragraph applies to the performance testing of control devices. Flares shall meet the provisions in paragraph (d)(2) of §63.1282:~~

~~(2) An owner or operator shall design and operate each flare, as defined in §63.1271, in accordance with the requirements specified in §63.11(b) and the compliance determination shall be conducted using Method 22 of 40 CFR part 60, appendix A, to determine visible emissions.~~

~~**[40 C.F.R. §§ 63.1282(d), 63.1282(d)(2), 63.1281(d)(3), and 63.1283(a); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

7.4. Recordkeeping Requirements

7.4.1. Except as specified in paragraphs (c) and (d) of §63.1284, each owner or operator of a facility subject to this subpart shall maintain the records specified in paragraphs §63.1284(b)(1) through (10).~~(3) of this condition:~~

(1) The owner or operator of an affected source subject to the provisions of 40 C.F.R. 63 Subpart HHH shall maintain files of all information (including all reports and notifications) required by this subpart. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or period.

(i) All applicable records shall be maintained in such a manner that they can be readily accessed.

(ii) The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request.

(iii) The remaining 4 years of records may be retained offsite.

(iv) Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

(2) Records specified in §63.10(b)(2);

(9) Records of glycol dehydration unit baseline operations calculated as required under §63.1281(e)(1).

~~(3) Records specified in §63.10(c) for each monitoring system operated by the owner or operator in accordance with the requirements of §63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified in paragraphs (b)(3)(i) through (iv) of this section shall not be included in any average or percent leak rate computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating or failed to collect required data.~~

~~(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low level) and high level adjustments;~~

~~(ii) [Reserved]~~

(iii) Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; and

(iv) Excursions due to invalid data as defined in §63.1283(d)(6)(iii).

[40 C.F.R. §§ 63.1284(b), (b)(1), (b)(2), and (b)(9)(3); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.4.2. Each owner or operator using a control device to comply with §63.1274 shall keep the following records up-to-date and readily accessible:

(i) Continuous records of the equipment operating parameters specified to be monitored under §63.1283(d) or specified by the Administrator in accordance with §63.1283(d)(3)(iii). For flares, the hourly records and records of pilot flame outages specified in paragraph (c) of this section shall be maintained in place of continuous records.

(ii) Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in §63.1283(d)(4) of this subpart, except as specified in paragraph (ii)(A) of this condition.

(A) For flares, the records required in paragraph (e) of §63.1284 (permit condition 7.4.4.5.).

(iii) Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating.

(iv) Where a seal or closure mechanism is used to comply with §63.1281(c)(3)(i)(B), hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.

[40 C.F.R. §63.1284(b)(4); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.4.3. Except as specified in paragraphs (c) and (d) of this section, each owner or operator of a facility subject to this subpart shall maintain the records specified in paragraphs (5) through (8) of this section:

(5) Records identifying all parts of the closed vent system that are designated as unsafe to inspect in accordance with §63.1283(c)(5), an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(6) Records identifying all parts of the closed vent system that are designated as difficult to inspect in accordance with §63.1283(c)(6), an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(7) For each inspection conducted in accordance with §63.1283(c), during which a leak or defect is detected, a record of the information specified in paragraphs (7)(i) through (7)(viii) of this section.

(i) The instrument identification numbers, operator name or initials, and identification of the equipment.

(ii) The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.

(iii) Maximum instrument reading measured by the method specified in §63.1282(b) after the leak or defect is successfully repaired or determined to be nonrepairable.

(iv) "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.

(v) The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be effected without a shutdown.

(vi) The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days.

(vii) Dates of shutdowns that occur while the equipment is unrepaired.

(viii) The date of successful repair of the leak or defect.

(8) For each inspection conducted in accordance with §63.1283(c) during which no leaks or defects are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected.

[40 C.F.R. §§ 63.1284(b)(5) through (b)(8); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.4.4. An owner or operator that elects to comply with the benzene emission limit specified in §63.1275(b)(1)(ii) (permit condition 7.1.5.) shall document, to the Administrator's satisfaction, the following items:

(1) The method used for achieving compliance and the basis for using this compliance method; and

(2) The method used for demonstrating compliance with 0.90 megagrams per year of benzene.

(3) Any information necessary to demonstrate compliance as required in the methods specified in paragraphs (1) and (2) of this condition.

[40 C.F.R. §§ 63.1284(c), and (c)(1) through (c)(3); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

~~7.4.5. Record the following when using a flare to comply with §63.1281(d):~~

~~(1) Flare design (i.e., steam-assisted, air-assisted, or non-assisted);~~

~~(2) All visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations made during the compliance determination required by §63.1282(d)(2); and~~

~~(3) All hourly records and other recorded periods when the pilot flame is absent.~~

~~**[40 C.F.R. §§ 63.1284(e), and (e)(1) through (e)(3); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]**~~

7.4.2.~~6.~~ The owner or operator of an affected source subject to this subpart shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control equipment and monitoring equipment. The owner or operator shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1274(h), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
[40 C.F.R. §63.1284(f); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.5. Reporting Requirements

7.5.1. All reports required under 40 C.F.R. 63 Subpart HHH shall be sent to the Administrator at the appropriate address listed in §63.13. Reports may be submitted on electronic media.
[40 C.F.R. §63.1274(b); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.5.2. If there was a malfunction during the reporting period, the Periodic Report specified in paragraph (e) of §63.1285 (permit condition 7.5.3.) shall 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 §63.1274(h), including actions taken to correct a malfunction.
[40 C.F.R. §63.1285(b)(6); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.5.3. *Periodic Reports.* An owner or operator shall prepare Periodic Reports in accordance with paragraphs (e)(1) and (2) of this section and submit them to the Administrator.

(1) An owner or operator shall submit Periodic Reports semiannually beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due.

(2) The owner or operator shall include the information specified in paragraphs (e)(2)(i) through (xiii) of §63.1285~~this section~~, as applicable.

~~(i) The information required under §63.10(e)(3). For the purposes of this subpart and the information required under §63.10(e)(3), excursions (as defined in §63.1283(d)(6)) shall be considered excess emissions.~~

~~(ii) A description of all excursions as defined in §63.1283(d)(6) of this subpart that have occurred during the 6-month reporting period.~~

~~(C) For each excursion caused by lack of monitoring data, as specified in §63.1283(d)(6)(iii), the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.~~

~~(iii) For each inspection conducted in accordance with §63.1283(c) during which a leak or defect is detected, the records specified in §63.1284(b)(7) must be included in the next Periodic Report.~~

~~(iv) For each closed vent system with a bypass line subject to §63.1281(c)(3)(i)(A), records required under §63.1284(b)(4)(iii) of all periods when the vent stream is diverted from the control device through a bypass line. For each closed-vent system with a bypass line subject to §63.1281(c)(3)(i)(B), records required under §63.1284(b)(4)(iv) of all periods in which the seal or closure mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out.~~

~~(v) If an owner or operator elects to comply with §63.1275(b)(1)(ii), the records required under §63.1284(c)(3).~~

~~(vi) The information in paragraphs (e)(2)(vi)(A) and (B) of this section shall be stated in the Periodic Report, when applicable.~~

~~(A) No excursions.~~

~~(B) No continuous monitoring system has been inoperative, out of control, repaired, or adjusted.~~

~~(vii) Any change in compliance methods as specified in §63.1282(e).~~

~~(viii) If the owner or operator elects to comply with §63.1275(c)(2), the records required under §63.1284(b)(10).~~

~~(ix) For flares, the records specified in §63.1284(e).~~

~~(x) The results of any periodic test as required in §63.1282(d)(3) conducted during the reporting period.~~

~~(xii) For combustion control device inspections conducted in accordance with §63.1283(b) the records specified in §63.1284(h).~~

(xiii) Certification by a responsible 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.

[40 C.F.R. §§ 63.1285(e), (e)(1), (e)(2), ~~(e)(2)(i) through (x), (e)(2)(xii)~~ and (e)(2)(xiii); 40 C.F.R. §63.1285(b)(5); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.5.4. *Notification of process change.* Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the owner or operator shall submit a report within

180 days after the process change is made or as a part of the next Periodic Report as required under paragraph (e) of §63.1285 (permit condition 7.5.3.), whichever is sooner. The report shall include:

(1) A brief description of the process change;

(2) A description of any modification to standard procedures or quality assurance procedures;

(3) Revisions to any of the information reported in the original Notification of Compliance Status Report under paragraph (d) of §63.1285; and

(4) Information required by the Notification of Compliance Status Report under paragraph (d) of §63.1285 for changes involving the addition of processes or equipment.

[40 C.F.R. §63.1285(f); 40 C.F.R. §63.1274(c)(3); 45CSR34 and 45CSR13, R13-2149, 7.1.3]

7.6. Compliance Plan

7.6.1. Reserved.

8.0. 45CSR13, Permit No. R13-2149 Requirements [emission unit IDs: 081G3, 081G4, 08108, DEG-DEHY1, DEG-DEHY2, DEG-DEHY3, ~~FLLP2~~FLLP1]

8.1. Limitations and Standards

8.1.1. The quantity of natural gas that shall be consumed in the 440 hp Waukesha VGF18GL, 4 cycle lean burn natural gas fired reciprocating engine (081G3) shall not exceed 3,972 cubic feet per hour or 34.79 x 10^6 cubic feet per year.
[45CSR13, R13-2149, 5.1.1.]

8.1.2. Maximum emissions from the 440 hp Waukesha VGF18GL, 4 cycle lean burn natural gas fired reciprocating engine (081G3) shall not exceed the following limits:

Emission Unit ID	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
081G3	Nitrogen Oxides	2.52	11.05
	Carbon Monoxide	1.70	7.44
	Volatile Organic Compounds	0.73	3.19

[45CSR13, R13-2149, 5.1.2.]

8.1.3. Maximum emissions from the 3,700 hp Caterpillar G3612, 4-stroke lean burn natural gas-fired reciprocating engine (08108) shall not exceed the following limits:

Emission Unit ID	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
08108	Nitrogen Oxides	2.45	10.72
	Carbon Monoxide	1.42	6.22
	Volatile Organic Compounds	0.46	2.04

[45CSR13, R13-2149, 5.1.3.]

8.1.4. Maximum emissions from the 880 hp Waukesha VGF-L36GL, 4-stroke lean burn natural gas-fired reciprocating emergency engine (081G4) shall not exceed the following limits:

Emission Unit ID	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
081G4	Nitrogen Oxides	3.60	0.90
	Carbon Monoxide	7.76	1.94
	Volatile Organic Compounds	1.04	0.26

[45CSR13, R13-2149, 5.1.4.]

8.1.5. The permittee shall comply with all applicable start-up and shutdown requirements in accordance with 40 C.F.R. Part 60 Subpart JJJJ and 40 C.F.R. Part 63 Subpart ZZZZ.
[45CSR13, R13-2149, 5.1.5.]

8.1.6. Requirements for Use of Catalytic Reduction Devices

a. Lean burn natural gas compressor engine (08108) equipped with oxidation catalyst air pollution control devices shall be fitted with a closed-loop automatic air-to-fuel ratio feedback controller to ensure emissions of regulated pollutants do not exceed the emission limit listed in Condition 8.1.3. for any engine/oxidation catalyst combination under varying load. The closed-loop, automatic air-to-fuel ratio controller shall control a fuel metering valve to ensure a lean-rich mixture.

b. For natural gas compressor engine (08108), the permittee shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the permittee shall also check for thermal deactivation of the catalyst before normal operations are resumed.

c. The permittee shall follow a written operation and maintenance plan that provides the periodic and annual maintenance requirements.

d. No person shall knowingly:

1. Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of this permit;

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 this permit; or

3. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

[45CSR13, R13-2149, 5.1.6.]

8.1.7.~~3.~~ **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1 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, R13-2149, 4.1.2.] (~~FLLP2~~FLLP1 and OxCat)

8.1.8.~~4.~~ **Maximum Throughput Limitation**. The maximum wet natural gas throughput to each of the glycol dehydration units / still columns (DEG-DEHY1, DEG-DEHY2, DEG-DEHY3) shall not exceed 4.875 MMscf/hr or 117 MMscf/day. Compliance with the Maximum Throughput Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the monthly throughput at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-2149, 7.1.1.]

8.1.9.~~5.~~ **Flare**
The enclosed Dehydrator Flare, identified as ~~FLLP2~~FLLP1, shall operate according to the following requirements:

a. The flare shall be non-assisted and the maximum capacity of the flare shall not exceed a maximum design heat input of 6.0 mmBtu/hr;

b. The maximum combustion exhaust emissions from the enclosed flare shall not exceed the limits given in the following table:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.41	1.79
Carbon Monoxide	1.86	8.15

c. The flare shall be designed, operated, and maintained according to good engineering practices or manufacturing recommendations so as to achieve, at a minimum, a hydrocarbon combustion rate of 98.0%;

d. **45CSR6**
The flare is subject to 45CSR6. The requirements of 45CSR6 include but are not limited to the following:

i. 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, is either 5.43 for an incinerator with a capacity of less than 15,000 lbs/hr or 2.72 for an incinerator with a capacity of 15,000 lbs/hr or greater.
[45CSR6 §4.1]

ii. 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.
[45CSR6 §4.3]

iii. The provisions of paragraph (ii) shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per startup.
[45CSR6 §4.4]

iv. No person shall cause or allow 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.
[45CSR6 §4.5]

v. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR6 §4.6]

vi. At such reasonable times as the Secretary may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 or other equivalent U.S. EPA approved method approved by the Secretary, in exhaust gases. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner acceptable to the Secretary. The Secretary may, at the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all the 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.
[45CSR6 §7.1]

vii. The Secretary may conduct such other tests as the Secretary may deem necessary to evaluate air pollution emissions other than those noted above.
[45CSR6 §7.2]

viii. Due to unavoidable malfunction of equipment, emissions exceeding those provided for in this rule may be permitted by the Director for periods not to exceed five (5) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR6 §8.2]

[45CSR13, R13-2149, 7.1.2.]

8.1.10. The following equipment shall cease operation when the 3,700 hp natural gas-fired Caterpillar G3612 RICE (08108) completes commissioning and is placed in service: 800 hp Clark HRA-8 RICEs (08101, 08102, 08103) and 1,080 hp Solar Saturn Turbine Engine (T-1001). This equipment will be removed from the site within twelve (12) months from the time 08108 completes commissioning and is placed in service. The permittee shall notify the DAQ per Condition 2.18 of R13-2149E when this equipment is removed from service. Furthermore, the permittee shall submit a Class I administrative update permit application to remove the equipment from this permit at that time.
[45CSR13, R13-2149, 4.1.4.]

8.2. Monitoring Requirements

8.2.1. The permittee shall monitor the throughput of wet natural gas fed to the dehydration system on a monthly basis for each glycol dehydration unit (DEG DEHY-1, DEG-DEHY2, DEG-DEHY3).
[45CSR13, R13-2149, 7.2.1.]

8.2.2. Catalytic Reduction Device

a. 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:

1. Maintaining proper operation of the automatic air-to-fuel ratio controller or automatic feedback controller.

2. Following operating and maintenance recommendations of the catalyst element manufacturer.

[45CSR13, R13-2149, 5.2.1]

8.3. Testing Requirements

8.3.1. In order to demonstrate compliance with the flare opacity requirements of 45CSR6 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 40CFR60 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, R13-2149, 7.3.1.]

8.4. Recordkeeping Requirements

8.4.1. To demonstrate compliance with conditions 8.1.1. through 8.1.4.~~and 8.1.2.~~, the permittee shall maintain records of the quantity of natural gas consumed in the engine and the hours of operation of ~~the~~ each engine. Said records shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, R13-2149, 5.4.1.] (08108, 081G3, 081G4)

8.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment 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, R13-2149, 4.1.3.] (~~FLLP2~~FLLP1)

8.4.3. For the purpose of demonstrating compliance with the flare opacity requirements of 45CSR6, the permittee shall maintain records of the visible emission opacity tests conducted per Section 8.3.1.
[45CSR13, R13-2149, 7.4.1]

8.4.4. The permittee shall maintain a record of the wet natural gas throughput through the dehydration system to demonstrate compliance with the natural gas throughput limit set forth in Condition 8.1.8.~~8.1.4.~~
[45CSR13, R13-2149, 7.4.2]

8.4.5. All records required under conditions 8.4.3. through 8.4.4 shall be maintained on site or in a readily accessible off-site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, R13-2149, 7.4.3]

8.4.6. To demonstrate compliance with Condition 8.1.6., the permittee shall maintain records of all catalytic reduction device maintenance. Said records shall be maintained on site or in a readily accessible off site location maintained by the permittee for a period of five (5) years. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.
[45CSR13, R13-2149, 5.4.2.]

8.5. Reporting Requirements

8.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-2149, 7.5.1.]

8.6. Compliance Plan

8.6.1. Reserved.

9.0. 40 C.F.R. 60, Subpart JJJJ Requirements [emission unit IDs: 08108, 081G4]

9.1. Limitations and Standards

9.1.1. The provisions of 40 C.F.R. Part 60 Subpart JJJJ are applicable to owners and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs a.1. and a.2. this condition. For the purposes of Subpart JJJJ, the date that construction commences is the date the engine is ordered by the owner or operator.

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

1. On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP); and

2. On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25HP).

[40 C.F.R. §§60.4230(a), (a)(4), (a)(4)(i), and (a)(4)(iv); 45CSR16; 45CSR13, R13-2149, 8.1.1.]

9.1.2. Stationary SI ICE may be eligible for exemption from the requirements of 40 C.F.R. Part 60 Subpart JJJJ as described in 40 C.F.R. Part 1068, Subpart C (or the exemptions described in 40 C.F.R. Parts 1048 and 1054, 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.
[40 C.F.R. §60.4230(e); 45CSR16; 45CSR13, R13-2149, 8.1.2.]

9.1.3. 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 Subpart JJJJ of Part 60 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 C.F.R. 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 Subpart JJJJ of Part 60, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

Table 1 to Subpart JJJJ of Part 60 – NO_X, CO, and VOC Emission Standards for Non-Emergency SI Engines ≥ 100 HP and Stationary Emergency Engines > 25 HP

Engine Type and Fuel	Maximum Engine Power	Manufacture Date	Emission Standards[1]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[3]	NO_X	CO	VOC[3]
Non-Emergency SI Natural Gas[2] (08108)	HP ≥ 500	7/1/2010	1.0	2.0	0.7	82	270	60

Engine Type and Fuel	Maximum Engine Power	Manufacture Date	Emission Standards[1]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[3]	NO_X	CO	VOC[3]
Emergency (081G4)	HP ≥ 130	1/1/2009	2.0	4.0	1.0	160	540	86

[1] 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 O_2.
[2] Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 C.F.R. Part 63 Subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of Table 1 to Subpart JJJJ of Part 60.
[3] For purposes of 40 C.F.R. Part 60 Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[40 C.F.R. §60.4233(e), Table 1 to Subpart JJJJ of Part 60; 45CSR16; 45CSR13, R13-2149, 8.2.1.]

9.1.4. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 C.F.R. §60.4233 (permit condition 9.1.3.) over the entire life of the engine.
[40 C.F.R. §60.4234; 45CSR16; 45CSR13, R13-2149, 8.2.2.]

9.1.5. If the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.
[40 C.F.R. §60.4237(a); 45CSR16] (081G4)

9.1.6. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs a. through c. of this condition. In order for the engine to be considered an emergency stationary ICE under 40 C.F.R. Part 60 Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs a. through c., is prohibited. If you do not operate the engine according to the requirements in paragraphs a. through c., the engine will not be considered an emergency engine under 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 the purpose specified in paragraph b.1. of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. of this condition counts as part of the 100 hours per calendar year allowed by this paragraph b.

1. 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 provided in paragraph b. of this condition. Except as provided in paragraph c.1. of this condition, 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.

1. 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:

i. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

ii. 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.

iii. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

iv. The power is provided only to the facility itself or to support the local transmission and distribution system.

v. 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.

[40 C.F.R. §60.4243(d); 45CSR16; 45CSR13, R13-2149, 8.3.2.] (081G4)

9.1.7. 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 C.F.R. §60.4233.
[40 C.F.R. §60.4243(e); 45CSR16]

9.1.8. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The air-to-fuel ratio 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.
[40 C.F.R. §60.4243(g); 45CSR16]

9.2. Monitoring Requirements

9.2.1. If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in 40 C.F.R. §60.4233(e), you must demonstrate compliance according to the method specified in this condition.

a. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(e) and according to the requirements specified in §60.4244, as applicable, and according to paragraph a.1. of this condition.

1. 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.

[40 C.F.R. §§60.4243(b), (b)(2), and (b)(2)(ii); 45CSR16; 45CSR13, R13-2149, 8.3.1.]

9.3. Testing Requirements

9.3.1. Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs a. through f. of this condition.

a. Each performance test must be conducted within 10 percent of 100 percent peak (or highest achievable) load and according to the requirements in 40 C.F.R. §60.8 and under the specific conditions that are specified by Table 2 to 40 C.F.R. Part 60 Subpart JJJJ.

b. You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 C.F.R. §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 condition, as specified in 40 C.F.R. §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 this section:

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

Where:
ER = Emission rate of 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°C.
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
T = Time of test run, in hours.

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

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

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

Where:
ER = Emission rate of CO in g/HP-hr.
C_d = Measured CO concentration in ppmv.
1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20°C.
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 40 C.F.R. Part 60 Subpart JJJJ, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

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

Where:
ER = Emission rate of VOC in g/HP-hr.
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°C.
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 C.F.R. Part 60, Appendix A, or Method 320 of 40 C.F.R. Part 63, Appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \quad \text{Eq. 4}$$

Where:
RF_i = Response factor of compound i when measured with EPA Method 25A.
C_{Mi} = Measured concentration of compound i 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.

$$C_{Peq} = 0.6098 \times C_{icorr}$$ Eq. 6

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

[40 C.F.R. §60.4244; 45CSR16; 45CSR13, R13-2149, 8.4.1.]

9.4. Recordkeeping Requirements

9.4.1. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs a. through c. of this condition.

a. All notifications submitted to comply with 40 C.F.R. Part 60 Subpart JJJJ and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. 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 C.F.R. §60.4243(a)(2), documentation that the engine meets the emission standards.

[40 C.F.R. §§60.4245(a), (a)(1), (a)(2), and (a)(4); 45CSR16; 45CSR13, R13-2149, 8.5.1.a.]

9.4.2. 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 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.
[40 C.F.R. §60.4245(b); 45CSR16; 45CSR13, R13-2149, 8.5.1.b.] (081G4)

9.5. Reporting Requirements

9.5.1. 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 C.F.R. §60.4231 must submit an initial notification as required in 40 C.F.R. §60.7(a)(1). The notification must include the information in paragraphs a. through e. of this condition.

a. Name and address of the owner or operator;

b. The address of the affected source;

c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

d. Emission control equipment; and

e. Fuel used.

[40 C.F.R. §60.4245(c); 45CSR16; 45CSR13, R13-2149, 8.5.1.c.]

9.5.2. 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 C.F.R. §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference-see 40 C.F.R. §60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
[40 C.F.R. §60.4245(d); 45CSR16; 45CSR13, R13-2149, 8.5.1.d.]

9.5.3. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in 40 C.F.R. §60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs a. through c. of this condition.

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 C.F.R. §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 C.F.R. §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. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent 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 40 C.F.R. Part 60 Subpart JJJJ 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 C.F.R. §60.4.

[40 C.F.R. §60.4245(e); 45CSR16] (081G4)

9.6. Compliance Plan

9.6.1. Reserved.

10.0. 40 C.F.R. 60, Subpart OOOOb Requirements [emission unit ID: 08108]

10.1. Limitations and Standards

10.1.1. a. You must be in compliance with the standards of 40 C.F.R. Part 60 Subpart OOOOb no later than May 7, 2024 or upon initial startup, whichever date is later, except as specified in paragraph a.1. of this condition for reciprocating compressor affected facilities.

1. You must comply with the requirements of §60.5385b(a) (permit condition 10.1.2.a.) for your reciprocating compressor affected facility as specified in paragraph a.1.i., ii., or iii. of this condition, as applicable.

i. You must comply with the requirements of §§60.5385b(a)(1) and (d)(3) (permit conditions 10.1.2.a.1. and d.3.) on or before 8,760 hours of operation after May 7, 2024, on or before 8,760 hours of operation after last rod packing replacement, or on or before 8,760 hours of operation after startup, whichever date is later; and

ii. You must comply with the requirements of 40 C.F.R. §60.5385b(a)(2) (permit condition 10.1.2.a.2.) within 8,760 hours after compliance with §§60.5385b(a)(1) and (d)(3) (permit conditions 10.1.2.a.1. and d.3.)

iii. You must comply with the requirements of 40 C.F.R. §§60.5385b(d)(1) and (2) (permit condition 10.1.2.d.1. and d.2.) for your reciprocating compressor upon initial startup.

b. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating 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, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 C.F.R. §60.8(c) do not apply to 40 C.F.R. Part 60 Subpart OOOOb.

[40 C.F.R. §§60.5370b(a), (a)(1), and (b); 45CSR16]

10.1.2. Each reciprocating compressor affected facility must comply with the GHG and VOC standards, using volumetric flow rate as a surrogate, in paragraphs a. through c. of this condition, or the GHG and VOC standards in paragraph d. of this condition. You must also comply with the requirements in paragraphs e. through g. of this condition.

a. The volumetric flow rate of each cylinder, measured in accordance with paragraph b. or c. of this condition, must not exceed 2 scfm per individual cylinder. If the individual cylinders are manifolded to a single open-ended vent line, the volumetric flow rate must not exceed the sum of the individual cylinders multiplied by 2 scfm. You must conduct measurements of the volumetric flow rate in accordance with the schedule specified in paragraphs a.1. and 2. of this condition and determine the volumetric flow rate per cylinder in accordance with paragraph b. or c. of this condition. If the volumetric flow rate, measured in accordance with paragraph b. or c. of this condition, for a cylinder exceeds 2 scfm per cylinder (or a combined volumetric flow rate greater than the number of compression

cylinders multiplied by 2 scfm), the rod packing or packings must be repaired or replaced as provided in paragraph a.3. of this condition.

1. You must conduct your first volumetric flow rate measurements from your reciprocating compressor rod packing vent on or before 8,760 hours of operation after May 7, 2024, or on or before 8,760 hours of operation after last rod packing replacement, or on or before 8,760 hours of operation after startup, whichever date is later.

2. You must conduct subsequent volumetric flow rate measurements from your reciprocating compressor rod packing vent on or before 8,760 hours of operation after the previous measurement which demonstrates compliance with the applicable volumetric flow rate of 2 scfm per cylinder (or a combined volumetric flow rate greater than the number of compression cylinders multiplied by 2 scfm), or on or before 8,760 hours of operation after last rod packing replacement, whichever date is later.

3. The rod packing must be repaired or replaced within 90 calendar days after the date of the volumetric emissions measurement that exceeded 2 scfm per cylinder. You must conduct follow-up volumetric flow rate measurements from compressor vents using the methods specified in paragraph b. of this condition within 15 days after the repair (or rod packing replacement) to document that the rate has been reduced to less than 2 scfm per cylinder. Delay of repair will be allowed if the conditions in paragraphs a.3.i. or ii. of this condition are met.

    i. If the repair (or rod packing replacement) is technically infeasible, would require a vent blowdown, a compressor station shutdown, or would be unsafe to repair during operation of the unit, the repair (or rod packing replacement) must be completed during the next scheduled compressor station shutdown for maintenance, after a scheduled vent blowdown, or within 2 years of the date of the volumetric emissions measurement that exceeds the applicable required flow rate per cylinder, whichever is earliest. A vent blowdown is the opening of one or more blowdown valves to depressurize major production and processing equipment, other than a storage vessel.

    ii. If the repair requires replacement of the rod packing or a part, but the replacement cannot be acquired and installed within the repair timelines specified under this condition due to the condition specified in paragraph a.3.ii.1. of this condition, the repair must be completed in accordance with paragraph a.3.ii.2. of this condition and documented in accordance with 40 C.F.R. §§60.5420b(c)(5)(viii) through (x) (permit condition 10.4.1.a.7. through a.10.).

        1. Rod packing or part supplies had been sufficiently stocked but are depleted at the time of the required repair.

        2. The required rod packing or part replacement must be ordered no later than 10 calendar days after the reciprocating compressor is added to the delay of repair list due to parts unavailability. The repair must be completed as soon as practicable, but no later than 30 calendar days after receipt of the replacement rod packing or part, unless the repair requires a compressor station shutdown. If the repair requires a compressor station shutdown, the repair must be completed in accordance with the timeframe specified in paragraph a.3.i. of this condition.

b. You must determine the volumetric flow rate per cylinder from your reciprocating compressor as specified in paragraph b.1. or 2. of this condition.

1. For reciprocating compressor rod packing equipped with an open-ended vent line on compressors in operating or standby pressurized mode, determine the volumetric flow rate of the rod packing using one of the methods specified in paragraphs b.1.i. through iii. of this condition.

i. Determine the volumetric flow rate at standard conditions from the open-ended vent line using a high-volume sampler according to methods set forth in §60.5386b(c) (permit condition 10.3.1.c.).

ii. Determine the volumetric flow rate at standard conditions from the open-ended vent line using a temporary or permanent meter, according to methods set forth in §60.5386b(b) (permit condition 10.3.1.b.).

iii. Any of the methods set forth in §60.5386b(a) (permit condition 10.3.1.a.) to screen for leaks and emissions. For the purposes of this paragraph, emissions are detected whenever a leak is detected according to any of the methods in §60.5386b(a). If emissions are detected using the methods set forth in §60.5386b(a), then you must use one of the methods specified in paragraph b.1.i. and ii. of this condition to determine the volumetric flow rate per cylinder. If emissions are not detected using the methods in §60.5386b(a), then you may assume that the volumetric flow rate is zero.

2. For reciprocating compressor rod packing not equipped with an open-ended vent line on compressors in operating or standby pressurized mode, you must determine the volumetric flow rate of the rod packing using the methods specified in paragraphs b.2.i. and ii. of this condition.

i. You must use the methods described in §60.5386b(a) (permit condition 10.3.1.a.) to conduct leak detection of emissions from the rod packing case into an open distance piece, or, for compressors with a closed distance piece, you must conduct annual leak detection of emissions from the rod packing vent, distance piece vent, compressor crank case breather cap, or other vent emitting gas from the rod packing.

ii. You must measure emissions found in paragraph b.2.i. of this condition using a meter or high-volume sampler according to methods set forth in §§60.5386b(b) or (c) (permit condition 10.3.1.b. or c.).

c. For conducting measurements on manifolded groups of reciprocating compressor affected facilities, you must determine the volumetric flow rate from reciprocating compressor rod packing vent as specified in paragraph c.1. and 2. of this condition.

1. Measure at a single point in the manifold downstream of all compressor vent inputs and, if practical, prior to comingling with other non-compressor emission sources.

2. Determine the volumetric flow rate per cylinder at standard conditions from the common stack using one of the methods specified in paragraph c.2.i. through iv. of this condition.

i. A temporary or permanent flow meter according to the methods set forth in §60.5386b(b) (permit condition 10.3.1.b.).

ii. A high-volume sampler according to methods set forth in §60.5386b(c) (permit condition 10.3.1.c.).

iii. An alternative method, as set forth in §60.5386b(d) (permit condition 10.3.1.d.).

iv. Any of the methods set forth in §60.5386b(a) (permit condition 10.3.1.a.) to screen for emissions. For the purposes of this paragraph, emissions are detected whenever a leak is detected when using any of the methods in §60.5386b(a). If emissions are detected using the methods set forth in §60.5386b(a), then you must use one of the methods specified in paragraph c.2.i. through iii. of this condition to determine the volumetric flow rate per cylinder. If emissions are not detected using the methods in §60.5386b(a), then you may assume that the volumetric flow rate is zero.

d. As an alternative to complying with the GHG and VOC standards in paragraphs a. through c. of this condition, owners or operators can meet the requirements specified in paragraph d.1., 2., or 3. of this condition.

1. Collect the methane and VOC emissions from your reciprocating compressor rod packing using a rod packing emissions collection system that is operated to route the rod packing emissions to a process. In order to comply with this option, you must equip the reciprocating compressor with a cover that meets the requirements of §60.5411b(b). The cover must be connected through a closed vent system that meets the requirements of §§60.5411b(a) and (c).

2. Reduce methane and VOC emissions from each rod packing emissions collection system by using a control device that reduces methane and VOC emissions by 95.0 percent. In order to comply with this option, you must equip the reciprocating compressor with a cover that meets the requirements of §60.5411b(b). The cover must be connected through a closed vent system that meets the requirements of §§60.5411b(a) and (c) and the closed vent system must be routed to a control device that meets the conditions specified in §60.5412b.

3. As an alternative to conducting the required volumetric flow rate measurements under paragraph a. of this condition, an owner or operator can choose to comply by replacing the rod packing on or before 8,760 hours of operation after initial startup, on or before 8,760 hours of operation after May 7, 2024, on or before 8,760 hours of operation after the previous flow rate measurement, or on or before 8,760 hours of operation after the date of the most recent compressor rod packing replacement, whichever date is later.

e. You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410b(e) (permit condition 10.2.1.).

f. You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5415b(g) (permit condition 10.2.2.a.).

g. You must perform the reporting requirements as specified in §§60.5420b(b)(1), (6), (11), and (12) (permit condition 10.5.1.a. through d.), as applicable; and the recordkeeping requirements as specified in §§60.5420b(c)(5) and (8) through (13) (permit condition 10.4.1.), as applicable.

[40 C.F.R. §60.5385b; 45CSR16]

10.2. Monitoring Requirements

10.2.1. You must determine initial compliance with the standards for each affected facility using the requirements of paragraphs (a) through (k) of 40 C.F.R. §60.5410b. Except as otherwise provided in §60.5410b, the initial compliance period begins on the date specified in §60.5370b (permit condition 10.1.1.a.) and ends no later than 1 year after that date. The initial compliance period may be less than 1 full year.

a. *Reciprocating compressor affected facility*. To demonstrate initial compliance with the GHG and VOC standards for each reciprocating compressor affected facility as required by 40 C.F.R. §60.5385b (permit condition 10.1.2.), you must comply with paragraphs a.1. through 7. of this condition.

1. If you comply with §60.5385b by maintaining volumetric flow rate at or below 2 scfm per cylinder (or a combined cylinder volumetric flow rate greater than the number of compression cylinders multiplied by 2 scfm) as required by §60.5385b(a) (permit condition 10.1.2.a.), you must maintain volumetric flow rate at or below 2 scfm and you must conduct your initial annual volumetric flow rate measurement as required by §60.5385b(a)(1) (permit condition 10.1.2.a.1.).

2. If you comply with §60.5385b by collecting the methane and VOC emissions from your reciprocating compressor rod packing using a rod packing emissions collection system as required by §60.5385b(d)(1) (permit condition 10.1.2.d.1.), you must equip the reciprocating compressor with a cover that meets the requirements of §60.5411b(b), route emissions to a process through a closed vent system that meets the requirements of §§60.5411b(a) and (c), and you must conduct the initial inspections required in §§60.5416b(a) and (b).

3. If you comply with §60.5385b(d) (permit condition 10.1.2.d.) by collecting the emissions from your rod packing emissions collection system by using a control device to reduce VOC and methane emissions by 95.0 percent as required by §60.5385b(d)(2) (permit condition 10.1.2.d.2.), you must equip the reciprocating compressor with a cover that meets the requirements of §60.5411b(b), route emissions to a control device that meets the conditions specified in §60.5412b through a closed vent system that meets the requirements of §§60.5411b(a) and (c) and you must conduct the initial inspections required in §§60.5416b(a) and (b).

4. If you comply with §60.5385b(d)(2) (permit condition 10.1.2.d.2.), you must conduct an initial performance test as required in §60.5413b within 180 days after initial startup or by May 7, 2024, whichever date is later, or install a control device tested under §60.5413b(d) which meets the criteria in §§60.5413b(d)(11) and (e) and you must comply with the continuous compliance requirements of §60.5415b(f) (permit condition 10.2.2.b.).

5. If you comply with §60.5385b(d)(2) (permit condition 10.1.2.d.2.), you must install and operate the continuous parameter monitoring systems in accordance with §§60.5417b(a) through (i), as applicable.

6. You must submit the initial annual report for your reciprocating compressor as required in §§60.5420b(b)(1), (6), and (11) through (13) (permit conditions 10.5.1.a. through e.), as applicable.

7. You must maintain the records as specified in §§60.5420b(c)(5) and (8) through (13) (permit condition 10.4.1.), as applicable.

[40 C.F.R. §60.5410b(e); 45CSR16]

10.2.2. a. *Reciprocating compressor affected facility*. For each reciprocating compressor affected facility complying with §§60.5385b(a) through (c) (permit conditions 10.1.2.a. through c.), you must demonstrate continuous compliance according to paragraphs a.1., 5., and 6. of this condition. For each reciprocating compressor affected facility complying with §§60.5385b(d)(1) or (2) (permit condition 10.1.2.d.1. or d.2.), you must demonstrate continuous compliance according to paragraphs a.2., 5., and 6. of this condition. For each reciprocating compressor affected facility complying with §60.5385b(d)(3) (permit condition 10.1.2.d.3.), you must demonstrate continuous compliance according to paragraphs a.3. through 6. of this condition.

1. You must maintain the volumetric flow rate at or below 2 scfm per cylinder (or at or below the combined volumetric flow rate determined by multiplying the number of cylinders by 2 scfm), and you must conduct the required volumetric flow rate measurement of your reciprocating compressor rod packing vents in accordance with §60.5385b(b) (permit condition 10.1.2.b.) on or before 8,760 hours of operation after your last volumetric flow rate measurement which demonstrated compliance with the applicable volumetric flow rate.

2. You must operate the rod packing emissions collection system to route emissions to a control device or to a process through a closed vent system and continuously comply with the cover and closed vent requirements of §60.5416b. If you comply with §60.5385b(d) (permit condition 10.1.2.d.) by using a control device, you also must comply with the requirements in paragraph b. of this condition.

3. You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility since initial startup, since May 7, 2024, since the previous flow rate measurement, or since the date of the most recent reciprocating compressor rod packing replacement, whichever date is latest.

4. You must replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 8,760 hours.

5. You must submit the annual reports as required in §§60.5420b(b)(1), (6), and (11)(i) through (iv) (permit conditions 10.5.1.a., b., and c.), as applicable.

6. You must maintain the records required in §§60.5420b(c)(5), (8) through (10), and (12) (permit condition 10.4.1.a., b. through d., and f.), as applicable.

b. *Additional continuous compliance requirements for reciprocating compressor affected facilities*. For each reciprocating compressor affected facility referenced to this paragraph (§60.5415b(f)) from §60.5415b(g) (permit condition 10.2.2.a.), you must also install monitoring systems as specified in §60.5417b, demonstrate continuous compliance according to paragraph §60.5415b(f)(1), maintain the records in paragraph §60.5415b(f)(2), and comply with the reporting requirements specified in paragraph §60.5415b(f)(3).

[40 C.F.R. §§60.5415b(f) and (g); 45CSR16]

10.3. Testing Requirements

10.3.1. a. You must use one of the methods described in paragraphs a.1. and 2. of this section to screen for emissions or leaks from the reciprocating compressor rod packing when complying with 40 C.F.R. §60.5385b(b)(1)(iii) (permit condition 10.1.2.b.1.iii.).

1. *OGI instrument*. Use an OGI instrument for equipment leak detection as specified in paragraph a.1.i. of this condition. For the purposes of paragraph a.1.i. of this condition, any visible emissions observed by the OGI instrument from reciprocating rod packing vent is a leak.

   i. *OGI instrument as specified in 40 C.F.R. §60.5397b.* For reciprocating compressor affected facilities located at compressor stations, use an OGI instrument to screen for emissions from reciprocating rod packing vent in accordance with the elements in §60.5397b(c)(7).

2. *Method 21*. Use Method 21 in Appendix A-7 to 40 C.F.R. Part 60 according to §§60.5403b(b)(1) and (2). For the purposes of this condition, an instrument reading of 500 parts per million by volume (ppmv) above background or greater is a leak.

b. You must determine natural gas volumetric flow rate using a rate meter which meets the requirement in Method 2D in Appendix A-1 of 40 C.F.R. Part 60. Rate meters must be calibrated on an annual basis according to the requirements in Method 2D.

c. You must use a high-volume sampler to measure emissions of the reciprocating compressor rod packing vent in accordance with paragraphs c.1. through 7. of this condition.

   1. You must use a high-volume sampler designed to capture the entirety of the emissions from the applicable vent and measure the entire range of methane concentrations being emitted as well as the total volumetric flow at standard conditions. You must develop a standard operating procedure for this device and document these procedures in the appropriate monitoring plan. In order to get reliable results, persons using this device should be knowledgeable in its operation and the requirements in this condition.

   2. This procedure may involve hazardous materials, operations, and equipment. This procedure may not address all of the safety problems associated with its use. It is the responsibility of the user of this procedure to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to performing this procedure.

   3. The high-volume sampler must include a methane gas sensor(s) which meets the requirements in paragraphs c.3.i. through iii. of this condition.

      i. The methane sensor(s) must be selective to methane with minimal interference, less than 2.5 percent for the sum of responses to other compounds in the gas matrix. You must document the minimal interference through empirical testing or through data provided by the manufacturer of the sensor.

      ii. The methane sensor(s) must have a measurement range over the entire expected range of concentrations.

      iii. The methane sensor(s) must be capable of taking a measurement once every second, and the data system must be capable of recording these results for each sensor at all times during operation of the sampler.

   4. The high-volume sampler must be designed such that it is capable of sampling sufficient volume in order to capture all emissions from the applicable vent. Your high-volume sampler must include a

flow measurement sensor(s) which meets the requirements of paragraphs c.4.i. and ii. of this condition.

i. The flow measurement sensor must have a measurement range over the entire expected range of flow rates sampled. If needed multiple sensors may be used to capture the entire range of expected flow rates.

ii. The flow measurement sensor(s) must be capable of taking a measurement once every second, and the data system must be capable of recording these results for each sensor at all times during operation of the sampler.

5. You must calibrate your methane sensor(s) according to the procedures in paragraphs c.5.i.1. and 2. of this condition, and flow measurement sensors must be calibrated according to procedures in paragraph c.5.ii. of this condition.

i. For Methane Sensor Calibration:

1. Initially and on a semi-annual basis, determine the linearity at four points through the measurement range for each methane sensor using methane gaseous calibration cylinder standards. At each point, the difference between the cylinder value and the sensor reading must be less than 5 percent of the respective calibration gas value. If the sensor does not meet this requirement, perform corrective action on the sensor, and do not use the sampler until these criteria can be met.

2. Prior to and at the end of each testing day, challenge each sensor at two points, a low point, and a mid-point, using methane gaseous calibration cylinder standards. At each point, the difference between the cylinder value and the sensor reading must be less than 5 percent of the respective calibration gas value. If the sensor does not meet this requirement, perform corrective action on the sensor and do not use the sampler again until these criteria can be met. If the post-test calibration check fails at either point, invalidate the data from all tests performed subsequent to the last passing calibration check.

ii. Flow measurement sensors must meet the requirements in Method 2D in Appendix A-1 of 40 C.F.R. Part 60. Rate meters must be calibrated on an annual basis according to the requirements in Method 2D. If your flow sensor relies on ancillary temperature and pressure measurements to correct the flow rate to standard conditions, the temperature and pressure sensors must also be calibrated on an annual basis. Standard conditions are defined as 20°C (68°F) and 760 mm Hg (29.92 in Hg).

6. You must conduct sampling of the reciprocating compressor rod packing vent in accordance with the procedures in paragraphs c.6.i. through v. of this condition.

i. The instrument must be operated consistent with manufacturer recommendations; users are encouraged to develop a standard operating procedure to document the exact procedures used for sampling.

ii. Identify the rod packing vent to be measured and record the signal to noise ratio (S/N) of the engine. Collect a background methane sample in ppmv for a minimum of one minute and record the result along with the date and time.

iii. Approach the vent with the sample hose and adjust the sampler so that you are measuring at the full flow rate. Then, adjust the flow rate to ensure the measured methane concentration is within the calibrated range of the methane sensor and minimum methane concentration is at least 2 ppmv higher than the background concentration. Sample for a period of at least one minute and record the average flow rate in standard cubic feet per minute and the methane sample concentration in ppmv, along with the date and time. Standard conditions are defined as 20°C (68°F) and 760 mm Hg (29.92 in Hg).

iv. Calculate the leak rate according to the following equation:

$$Q = V\left(\frac{CH4_S - CH4_B}{1{,}000{,}000}\right)$$

Where:
$CH4_B$ = background methane concentration, ppmv
$CH4_S$ = methane sample concentration, ppmv
V = Average flow rate of the sampler, scfm
Q = Methane emission rate, scfm

v. You must collect at least three separate one-minute measurements and determine the average leak rate. The relative percent difference of these three separate samples should be less than 10 percent.

7. If the measured natural gas flow determined as specified in paragraph c.6. of this condition exceeds 70.0 percent of the manufacturer's reported maximum sampling flow rate you must either use a temporary or permanent flow meter according to paragraph b. of this condition or use another method meeting the requirements in paragraph d. of this condition to determine the leak or flow rate.

d. As an alternative to a high-volume sampler, you may use any other method that has been validated in accordance with the procedures specified in Method 301 in Appendix A in 40 C.F.R. Part 63, subject to Administrator approval, as specified in 40 C.F.R. §60.8(b).

[40 C.F.R. §§60.5386b(a), (a)(1), (a)(1)(ii), (a)(2), and (b) through (d); 45CSR16]

10.4. Recordkeeping Requirements

10.4.1. You must maintain the records identified as specified in §60.7(f) and in paragraphs §§60.5420b(c)(1) through (15). All records required by Subpart OOOOb must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by Subpart OOOOb that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

a. For each reciprocating compressor affected facility, you must maintain the records in §§60.5420b(c)(5)(i) through (x) (paragraphs a.1. through 10.), and (c)(8), (c)(10) and (c)(12), as applicable. If you comply with an alternative GHG and VOC standard under §60.5398b, in lieu of the information specified in §60.5420b(c)(8), you must provide the information specified in §60.5424b.

1. For each reciprocating compressor affected facility, you must maintain records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385b, including a description of each deviation, the date and time each deviation began and the duration of each deviation in hours.

2. Records of the date of installation of a rod packing emissions collection system and closed vent system as specified in §60.5385b(d).

3. Records of the cumulative number of hours of operation since initial startup, since May 7, 2024, or since the previous volumetric flow rate measurement, as applicable. Alternatively, a record that emissions from the rod packing are being routed to a process through a closed vent system.

4. A description of the method used and the results of the volumetric flow rate measurement or emissions screening, as applicable.

5. Records for all flow meters, composition analyzers and pressure gauges used to measure volumetric flow rates as specified in paragraphs a.5.i. through vi. of this condition.

   i. Description of standard method published by a consensus-based standards organization or industry standard practice.

   ii. Records of volumetric flow rate calculations conducted according to paragraphs §§60.5385b(b) or (c), as applicable.

   iii. Records of manufacturer operating procedures and measurement methods.

   iv. Records of manufacturer's recommended procedures or an appropriate industry consensus standard method for calibration and results of calibration, recalibration, and accuracy checks.

   v. Records which demonstrate that measurements at the remote location(s) can, when appropriate correction factors are applied, reliably and accurately represent the actual temperature or total pressure at the flow meter under all expected ambient conditions. You must include the date of the demonstration, the data from the demonstration, the mathematical correlation(s) between the remote readings and actual flow meter conditions derived from the data, and any supporting engineering calculations. If adjustments were made to the mathematical relationships, a record and description of such adjustments.

   vi. Record of each initial calibration or a recalibration which failed to meet the required accuracy specification and the date of the successful recalibration.

6. Date when performance-based volumetric flow rate is exceeded.

7. The date of successful replacement or repair of reciprocating compressor rod packing, including follow-up performance-based volumetric flow rate measurement to confirm successful repair.

8. Identification of each reciprocating compressor placed on delay of repair because of rod packing or part unavailability and explanation for each delay of repair.

9. For each reciprocating compressor that is placed on delay of repair because of replacement rod packing or part unavailability, the operator must document: the date the rod packing or part was added to the delay of repair list, the date the replacement rod packing or part was ordered, the anticipated rod packing or part delivery date (including any estimated shipment or delivery date provided by the vendor), and the actual arrival date of the rod packing or part.

10. Date of planned shutdowns that occur while there are any reciprocating compressors that have been placed on delay of repair due to the unavailability of rod packing or parts to conduct repairs.

b. Records of each closed vent system inspection required under §§60.5416b(a)(1) and (2) and (b) for your reciprocating compressor affected facility as required in §§60.5420b(c)(8)(i) through (iv).

c. A record of each cover inspection required under §60.5416b(a)(3) for your reciprocating compressor as required in §§60.5420b(c)(9)(i) through (iv).

d. For each bypass subject to the bypass requirements of §60.5416b(a)(4), you must maintain a record of the following, as applicable: readings from the flow indicator; each inspection of the seal or closure mechanism; the date and time of each instance the key is checked out; date and time of each instance the alarm is sounded.

e. Records for each control device used to comply with the emission reduction standard in §60.5385b(d)(2) (permit condition 10.1.2.d.2.) for reciprocating compressor affected facilities, as required in §§60.5420b(c)(11)(i) through (viii). If you use an enclosed combustion device or flare using an alternative test method approved under §60.5412b(d), keep records of the information in §60.5420b(c)(11)(ix), in lieu of the records required by §§60.5420b(c)(11)(i) through (iv) and (vi) through (viii).

f. For each closed vent system routing to a control device or process, the records of the assessment conducted according to §60.5411b(c):

1. A copy of the assessment conducted according to §60.5411b(c)(1); and

2. A copy of the certification according to §§60.5411b(c)(1)(i) and (ii).

g. A copy of each performance test submitted under §§60.5420b(b)(12) or (13) (permit condition 10.5.1.d. or e.)

[40 C.F.R. §§60.5420b(c), (c)(5), and (c)(8) through (c)(13); 45CSR16]

10.5. Reporting Requirements

10.5.1. You must submit annual reports containing the information specified in 40 C.F.R. §§60.5420b(b)(1) through (14) following the procedure specified in §60.5420b(b)(15). You must submit performance test reports as specified in §§60.5420b(b)(12) or (13), if applicable. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410b. Subsequent annual reports are due no later than the same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in §§60.5420b(b)(1) through (14). 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 40 C.F.R. Part 60 may be submitted as long as the schedule does not extend the reporting period.

a. The general information specified in paragraphs a.1. through 4. of this condition is required for all reports.

1. The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

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. If your report is submitted via CEDRI, the certifier's electronic signature during the submission process replaces the requirement in this paragraph a.4.

b. For each reciprocating compressor affected facility, the information specified in paragraphs b.1. through b.7. of this condition, as applicable.

1. The cumulative number of hours of operation since initial startup, since May 7, 2024, or since the previous volumetric flow rate measurement, or since the previous reciprocating compressor rod packing replacement, as applicable, which have elapsed prior to conducting your volumetric flow rate measurement or emissions screening. Alternatively, a statement that emissions from the rod packing are being routed to a process or control device through a closed vent system.

2. If applicable, for each deviation that occurred during the reporting period and recorded as specified in §60.5420b(c)(5)(i) (permit condition 10.4.1.a.1.), the date and time the deviation began, duration of the deviation in hours and a description of the deviation. If no deviations occurred during the reporting period, you must include a statement that no deviations occurred during the reporting period.

3. A description of the method used and the results of the volumetric flow rate measurement or emissions screening, as applicable.

4. If complying with §60.5385b(d) (permit condition 10.1.2.d.), the information in §§60.5420b(b)(11)(i) through (iv).

5. Number and type of rod packing replacements/repairs on delay of repair and explanation for each delay of repair.

6. Date of planned shutdown(s) that occurred during the reporting period if there are any rod packing replacements/repairs that have been placed on delay of repair.

7. If you comply with an alternative GHG and VOC standard under §60.5398b, in lieu of the information specified in §§60.5420b(b)(11)(i) and (ii), you must provide the information specified in §60.5424b.

c. For each reciprocating compressor affected facility which uses a closed vent system routed to a control device to meet the emissions reduction standard, you must submit the information in §§60.5420b(b)(11)(i) through (v). For each reciprocating compressor which uses a closed vent system to route to a process, you must submit the information in §§60.5420b(b)(11)(i) through (iv). For each reciprocating compressor equipped with a cover, you must submit the information in paragraphs §§60.5420b(b)(11)(i) and (ii).

d. Within 60 days after the date of completing each performance test (see §60.8) required by Subpart OOOOb, except testing conducted by the manufacturer as specified in §60.5413b(d), you must submit the results of the performance test following the procedures specified in §60.5420b(d). Data collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic -reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file.

e. For combustion control devices tested by the manufacturer in accordance with §60.5413b(d), an electronic copy of the performance test results required by §60.5413b(d) shall be submitted via email to Oil_and_Gas_PT@EPA.GOV unless the test results for that model of combustion control device are posted at the following website: https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry.

f. You must submit your annual report using the appropriate electronic report template on the Compliance and Emissions Data Reporting Interface (CEDRI) website for Subpart OOOOb and following the procedure specified in §60.5420b(d). If the reporting form specific to Subpart OOOOb is not available on the CEDRI website at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §60.4. Once the form has been available on the CEDRI website for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The date reporting forms become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in Subpart OOOOb, regardless of the method in which the report is submitted.

[40 C.F.R. §§60.5420b(b), (b)(1), (b)(6), (b)(11) through (b)(13), and (b)(15); 45CSR16]

10.6. Compliance Plan

10.6.1. Reserved.