

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: MM03/MM04 **SIC:** 2819
Name of Permittee: MarkWest Liberty Midstream & Resources LLC
Facility Name/Location: Mobley Gas Plant
County: Wetzel
Facility Address: 14624 North Fork Road, Smithfield, WV 26437

Description of Permit Revision: The minor modification MM03 is based on the permit R13-2878K to replace three (3) natural gas engines (CM-1004, CM-1005, and CM-1006) with three (3) electric motors. The minor modification MM04 is based on the permit R13-2878L to replace two (2) natural gas-fired Waukesha P9390 engines (CM-1002 and CM-1003) with two (2) like-in-kind natural gas-fired Waukesha P9390 engines.

Permit Number: R30-10300042-2022
Issued Date: March 15, 2022
Effective Date: March 29, 2022
Expiration Date: March 15, 2027

Directions To Facility: From Smithfield, head southwest on County Road 2/1/Mannington Road toward WV 20S. Turn right at WV 20N and go 1.1 miles. Take the first right onto County Road 7/8/Fallen Timber Run Road and go 2.8 miles. Continue onto County Road 80/Fallen Timber Road/Shuman Hill for 0.8 miles. Turn right at County Road 80/Shuman Hill and go 1.5 miles. Turn right at County Road 15/North Fork Road and go 2.8 miles. The site will be 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
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Crowder@wv.gov C = US O = West Virginia Department
of Environmental Protection OU = Division of Air Quality
Date: 2024.11.13 09:28:55 -05'00'

Laura M. Crowder
Director, Division of Air Quality

November 13, 2024

Date Issued

Permit Number: **R30-10300042-2022**
Permittee: **MarkWest Liberty Midstream & Resources LLC**
Facility Name: **Mobley Gas Plant**
Permittee Mailing Address: **1515 Arapahoe Street, Tower 1, Suite 1600**
Denver, CO 80202-2137

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:	Smithfield, Wetzel County, West Virginia
Facility Mailing Address:	14624 North Fork Road, Smithfield, WV 26437
Telephone Number:	(724)514-4367
Type of Business Entity:	LLC
Facility Description:	Natural gas gathering and processing plant.
SIC Codes:	2819
UTM Coordinates:	538.099 km Easting • 4,378.315 km Northing • Zone 17

Permit Writer: Robert Mullins

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

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

Table of Contents

1.0	Emission Units and Active R13, R14, and R19 Permits.....	3
2.0	General Conditions.....	5
3.0	Facility-Wide Requirements.....	13
4.0	Source Specific Requirements Compressor Engines [emission point ID(s): CM-1002, CM-1003, CM-1004, CM-1005, CM-1006, <u>M-1004, M-1005, M-1006</u>, C-102, & C-103].....	19
5.0	Source Specific Requirements Process Heaters [emission point ID(s): H-2741, H-2781, H-1741, H-1781, H-3741, H-4741, H-3781, H-5741, H-5782]	<u>3939</u>
6.0	Source Specific Requirements Flare.....	<u>4242</u>
7.0	Source-Specific Requirements (Emergency Generators (G-1, G-3, G-4)).....	<u>4747</u>
8.0	Source-Specific Requirements (Blowdown Operations)	<u>5151</u>
9.0	Source-Specific Requirements (40CFR60 Subpart OOOOa Requirements, Equipment Leak Standards)	<u>5353</u>
10.0	Source-Specific Requirement (Additional Requirements)	<u>5858</u>

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
M-1004	M-1004	Electric Motor Driven Compressor	2024	N/A	None
M-1005	M-1005	Electric Motor Driven Compressor	2024	N/A	None
M-1006	M-1006	Electric Motor Driven Compressor	2024	N/A	None
CM-1002	CM-1002	Waukesha P9390 GSI Compressor Engine	2012	1,980 HP	NSCR
CM-1003	CM-1003	Waukesha P9390 GSI Compressor Engine	2012	1,980 HP	NSCR
CM-1004	CM-1004	Waukesha P9390 GSI Compressor Engine	2012	1,980 HP	NSCR
CM-1005	CM-1005	Waukesha P9390 GSI Compressor Engine	2012	1,980 HP	NSCR
CM-1006	CM-1006	Waukesha P9390 GSI Compressor Engine	2012	1,980 HP	NSCR
C-102	C-102	Caterpillar G3616 LE Engine	2012	4,735 HP	Oxid. Cat.
C-103	C-103	Caterpillar G3616 LE Engine	2012	4,735 HP	Oxid. Cat.
G-1	G-1	Generac MMG45 Generator	2012	53 HP	None
G-3	G-3	Generac MMG45 Generator	2012	58 HP	None
G-4	G-4	Generac MMG45 Generator	2012	58 HP	None
H-2741	H-2741	Regeneration Heater	2012	9.60 MMBtu/hr	None
H-2781	H-2781	Heat Medium Oil Heater	2012	26.32 MMBtu/hr	None
H-1741	H-1741	Regeneration Gas Heater	2012	7.96 MMBtu/hr	None
H-1781	H-1781	Heat Medium Oil Heater	2012	17.80 MMBtu/hr	None
H-3741	H-3741	Regeneration Gas Heater	2013	9.60 MMBtu/hr	None
H-4741	H-4741	Regeneration Gas Heater	2014	9.60 MMBtu/hr	None
H-3781	H-3781	Heat Medium Oil Heater	2013	26.32 MMBtu/hr	None
H-5741	H-5741	Regeneration Gas Heater	2015	9.60 MMBtu/hr	None
H-5782	H-5782	Heat Medium Oil Heater	2015	62.99 MMBtu/hr	None
FL-991	FL-991	Process Flare	2012	68,600 scf/hr	None
TK-087	TK-087	Methanol Tank	2012	520 gal	None
TK-2609	TK-2609	Methanol Tank	2012	520 gal	None
TK-3410	TK-3410	Methanol Tank	2012	520 gal	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
TK-3829	TK-3829	Methanol Tank	2012	520 gal	None
TK-4220	TK-4220	Methanol Tank	2012	520 gal	None
TK-4410	TK-4410	Methanol Tank	2012	520 gal	None
TK-1824	TK-1824	Closed Drain Tank	2012	4,265 gal	None
TK-4824	TK-4824	Closed Drain Tank	2012	4,533 gal	None

Control Devices

Emission Point ID	Control Device	Emission Unit	Pollutant	Control Efficiency
CM-1002 CM-1003 CM-1004 CM-1005 CM-1006	NSCR	Waukesha P9390 GSI Compressor Engine	Nitrogen Oxides	98.7%
			Carbon Monoxide	94.4%
			Volatile Organic Compounds	60 %
			Formaldehyde	80 %
C-102 C-103	Oxidation Catalyst	Caterpillar G3616LE Compressor Engine	Carbon Monoxide	93.7 %
			Volatile Organic Compounds	75 %
			Formaldehyde	80 %
FL-991	Flare	Process Flare	Volatile Organic Compounds	98 %
			Hazardous Air Pollutants	98 %

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
R13-2878 <u>L</u>	May 24, 2023 , July 8, 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 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). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2 Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance Standards
CBI	Confidential Business Information	PM	Particulate Matter
CEM	Continuous Emission Monitor	PM₁₀	Particulate Matter less than 10µm in diameter
CES	Certified Emission Statement	pph	Pounds per Hour
C.F.R. or CFR	Code of Federal Regulations	ppm	Parts per Million
CO	Carbon Monoxide	PSD	Prevention of Significant Deterioration
C.S.R. or CSR	Codes of State Rules	psi	Pounds per Square Inch
DAQ	Division of Air Quality	SIC	Standard Industrial Classification
DEP	Department of Environmental Protection	SIP	State Implementation Plan
FOIA	Freedom of Information Act	SO₂	Sulfur Dioxide
HAP	Hazardous Air Pollutant	TAP	Toxic Air Pollutant
HON	Hazardous Organic NESHAP	TPY	Tons per Year
HP	Horsepower	TRS	Total Reduced Sulfur
lbs/hr or lb/hr	Pounds per Hour	TSP	Total Suspended Particulate
LDAR	Leak Detection and Repair	USEPA	United States Environmental Protection Agency
m	Thousand	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VEE	Visual Emissions Evaluation
mm	Million	VOC	Volatile Organic Compounds
mmBtu/hr	Million British Thermal Units per Hour		
mmft³/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA or N/A	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

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

2.4. Permit Actions

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

2.5. Reopening for Cause

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

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

2.7. Minor Permit Modifications

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

2.8. Significant Permit Modification

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

2.9. Emissions Trading

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

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

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

[45CSR§30-5.9.]

2.11. Operational Flexibility

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

[45CSR§30-5.8]

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

[45CSR§30-5.8.a.]

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

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

[45CSR§30-5.8.c.]

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

[45CSR§30-2.40]

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.

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)(145)]
- 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. The fuel gas (residue gas) for the facility shall not exceed the following:

- a. Total VOCs content greater than 1% by weight on a 12-month rolling basis.
- b. Hydrogen sulfide or total sulfur compounds greater than 4 grains per 100 cubic feet of gas.

[45CSR13, R13-2878 Condition 3.1.7]

3.2. Monitoring Requirements

- 3.2.1. The permittee shall analyze the fuel gas for the facility once per month. Such analysis shall determine the net heating value, percentage of VOC in the fuel gas. Such analysis shall be maintained in accordance with Condition 3.4.2.

[45CSR13, R13-2878 Condition 3.2.1]

- 3.2.2. For the purpose of demonstrating compliance with Condition 3.1.9., the permittee shall conduct gas sampling at a point that is representative of the incoming field gas and analyzing the sample to determine the hydrogen sulfide content of the sample. At the minimum, such sampling and analysis shall be conducted once per year and thereafter. Once per year shall mean between 11 months to 13 months from the previous gas sampling. Records of such monitoring shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR§10-8.2.c and 45CSR§10-8.3.a, 45CSR13, R13-2878 Condition 3.2.2]

3.3. Testing Requirements

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

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

which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit shall be revised in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable.

- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 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)(~~145-156~~) 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, R13-2878 Conditions 4.4.1 and 7.3.1]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report,

application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. 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 Enforcement¹:

DEPAirQualityReports@wv.gov

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

- 3.5.4. **Fees.** The permittee shall pay fees on an annual basis in accordance with 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.**

- 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.
 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. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

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

[45CSR§30-5.1.c.3.B.]

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

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. 40 C.F.R. 60 Subpart Dc - The Mole Sieve Regeneration Heaters (H-1741, H-2741, H-3741, H-4741 and H-5741) meet the definition of process heaters under 40 C.F.R. 60 subpart Dc. Thus they are excluded as affected units (per definition of steam generating unit) under this regulation.
- b. 40 CFR 63 Subpart DDDDD - Subpart DDDDD of 40 CFR 63 establishes national emission limitations and work practice standards for HAPs emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. Pursuant to §63.7485, a boiler or process heater is subject to Subpart DDDDD if it "is located at, or is part of, a major source of HAP[s]." A major source of HAPs is defined under §63.2 as a source that "has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants". The Mobley Gas Plant does not have a potential to emit of HAPs at or above this threshold and is, therefore, not subject to Subpart DDDDD.
- c. 40 CFR 63 Subpart JJJJJ - Subpart JJJJJ of 40 CFR 63 establishes national emission limitations and work practice standards for HAPs emitted from industrial, commercial, and institutional boilers located at area sources of HAPs. An area source of HAPs is defined as a facility that has a PTE, considering controls, in the aggregate, of less than 10 tons per year of any HAP or less than 25 tons per year of any combination of HAPs. The Mobley Gas Plant meets the definition of an area source of HAPs.

Pursuant to §63.11237, the definition of "boiler" covered under Subpart JJJJJ is limited to "an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam or hot water." Pursuant to §63.11195, a gas-fired boiler is exempt from the requirements of Subpart JJJJJ. The heaters meet the definition of boiler and are exclusively "gas-fired" therefore, they are exempt from Subpart JJJJJ.

4.0 Source Specific Requirements Compressor Engines [emission point ID(s): CM-1002, CM-1003, ~~CM-1004, CM-1005, CM-1006~~, M-1004, M-1005, M-1006, C-102, & C-103]

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to the internal combustion engines identified as CM-1002; and CM-1003; ~~CM-1004, CM-1005, and CM-1006~~; and the connected compressors:

- a. Emissions from each engine shall not exceed the following:
 - i. NO_x emissions from the engine shall not exceed 82 ppmvd at 15 percent O₂. The mass rate of NO_x emissions from each engine shall not exceed 0.89 pounds per hour and 4.38 tpy.
 - ii. CO emissions from engine shall not exceed 270 ppmvd at 15 percent O₂. The mass rate of CO emissions from each engine shall not exceed 1.13 pounds per hour and 5.31 tpy.
 - iii. VOC emissions from the engine shall not exceed 60 ppmvd at 15 percent O₂. Formaldehyde is excluded from this VOC limit. The mass rate of VOC emissions shall not exceed 0.39 pounds per hour and 1.71 tpy.

[40 CFR §60.4233(e) & Table 1 to Subpart JJJJ of Part 60—NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP]

- iv. Formaldehyde emissions from each engine shall not exceed 0.04 pounds per hour and 0.18 tpy.
- b. Each engine shall be equipped with a non-selective catalytic reduction (NSCR) air pollution control device.
- c. Each engine shall be equipped with an air to fuel ratio (AFR) controller. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
[40 CFR §60.4243(g)]
- d. Each engine shall be equipped with a non-resettable hour meter.
- e. ~~The permittee shall replace the rod packing in each affected compressor once every 26,000 hours of operation. CM-1002 and CM-1003 (replaced with new identical units in 2024) shall comply with the Reciprocating Compressor requirements 40CFR60 Subpart OOOOb, specifically §60.5385b.~~

~~[40 CFR §60.5385(a)(1) and §60.5415(e)(3)]~~

[45CSR16; 45CSR13, R13-2878 Condition 4.1.1] (CM-1002; and CM-1003; ~~CM-1004, CM-1005, and CM-1006~~)

4.1.2. The following conditions and requirements are specific to the internal combustion engines identified as C-102 & C-103:

- a. Emissions from the engine shall not exceed the following:
 - i. NO_x emissions from the engine shall not exceed 82 ppmvd at 15 percent O₂. The mass rate of NO_x emissions shall not exceed 5.22 pounds per hour and 22.86 tpy.

- ii. CO emissions from engine shall not exceed 270 ppmvd at 15 percent O₂. The mass rate of CO emissions shall not exceed 1.80 pounds per hour and 8.13 tpy
- iii. VOC emissions from the engine shall not exceed 60 ppmvd at 15 percent O₂. Formaldehyde is excluded from this VOC limit. The mass rate of VOC emissions shall not exceed 2.19 pounds per hour and 9.64 tpy.

[40 CFR §60.4233(e) & Table 1 to Subpart JJJJ of Part 60—NOX, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP]

- iv. Formaldehyde emissions from each engine shall not exceed 0.54 pounds per hour and 2.40 tpy.
- b. Each engine shall be equipped with an oxidation catalyst air pollution control device.
- c. Each engine shall be equipped with an air to fuel ratio (AFR) controller. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
[40CFR§60.4243(g)]
- d. Each engine shall be equipped with a non-resettable hour meter.
- e. The permittee shall replace the rod packing in each affected compressor once every 26,000 hours of operation.
[40 CFR §60.5385(a)(1) and §60.5415(c)(3)]

[45CSR16; 45CSR13, R13-2878 Condition 4.1.2](C-102 and C-103)

- 4.1.3. The permittee shall only operate these engines using fuel gas, except during emergency operation at which the permittee may operate them using propane for a maximum of 100 hours per year.
[45CSR16; 45CSR13, R13-2878 Condition 4.1.3, 40CFR§60.4243(e)]

4.1.4. Requirements for Use of Oxidization Catalysts and NSCR

- a. Rich-burn natural gas-fired engine(s) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the emission limit listed in the General Permit Registration for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 2%.
- b. Lean-burn natural gas engine(s) equipped with oxidation catalyst air pollution control devices shall be fitted with a closed-loop automatic air/fuel ratio feedback controller to ensure emissions of regulated pollutants do not exceed the emission limit listed in the General Permit Registration for any engine/oxidation catalyst combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a lean-rich mixture.
- c. The automatic air/fuel ratio controller or closed-loop automatic feedback controller shall provide a warning or indication to the operator and/or be interlocked with the engine ignition system to cease engine operation in case of a masking, poisoning or overrich air/fuel ratio situation which results in performance degradation or failure of the catalyst element;
- d. The permittee shall check the air/fuel ratio every 1,500 service hours and adjust in accordance to the manufacturer's specifications. The permittee shall maintain these records for five (5) years. 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. The permittee shall also inspect for thermal deactivation of the catalyst before restarting the engine;

- e. No person shall knowingly:
 - i. Remove or render inoperative any air pollution or auxiliary air pollution control device installed subject to the requirements of this permit;
 - ii. 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
 - iii. Cause or allow engine exhaust gases to bypass any catalytic reduction device.

[45CSR13, R13-2878 Condition 4.1.4]

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

[45CSR§13-5.11., 45CSR13, R13-2878 Condition ~~4.1.5~~ 4.1.7]

- 4.1.6 The three (3) electric motor driven compressors identified as M-1004 – M-1006 and compressors connected to engines CM-1002 and CM-1003 shall comply with the Reciprocating Compressor requirements of 40CFR60 Subpart OOOOb, specifically §60.5385b as applicable.

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 §60.5385b, or the GHG and VOC standards in paragraph (d) of §60.5385b. You must also comply with the requirements in paragraphs (e) through (g) of §60.5385b.

- (a) The volumetric flow rate of each cylinder, measured in accordance with paragraph (b) or (c) of §60.5385b, 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 §60.5385b and determine the volumetric flow rate per cylinder in accordance with paragraph (b) or (c) of §60.5385b. If the volumetric flow rate, measured in accordance with paragraph (b) or (c) of §60.5385b, 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 §60.5385b.

- (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) or (c) of §60.5385b 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 paragraph (a)(3)(i) or (ii) of §60.5385b 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 section due to the condition specified in paragraph (a)(3)(ii)(A) of §60.5385b, the repair must be completed in accordance with paragraph (a)(3)(ii)(B) of §60.5385b and documented in accordance with § 60.5420b(c)(5)(viii) through (x).

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

(B) 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 §60.5385b.

(b) You must determine the volumetric flow rate per cylinder from your reciprocating compressor as specified in paragraph (b)(1) or (2) of §60.5385b.

(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 §60.5385b.

(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).

(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).

(iii) Any of the methods set forth in § 60.5386b(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 §60.5385b 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 §60.5385b.
- (i) You must use the methods described in § 60.5386b(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 §60.5385b using a meter or high-volume sampler according to methods set forth in § 60.5386b(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 §60.5385b.
- (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 §60.5385b.
- (i) A temporary or permanent flow meter according to the methods set forth in § 60.5386b(b).
- (ii) A high-volume sampler according to methods set forth § 60.5386b(c).
- (iii) An alternative method, as set forth in § 60.5386b(d).
- (iv) Any of the methods set forth in § 60.5386b(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 §60.5385b 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 §60.5385b, owners or operators can meet the requirements specified in paragraph (d)(1), (2), or (3) of §60.5385b.
- (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 section, an owner or operator can choose to comply by replacing the rod packing on or before 8,760 hours of operation after 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).
- (f) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5415b(g).
- (g) You must perform the reporting requirements as specified in § 60.5420b(b)(1), (6), and (11) through (13), as applicable; and the recordkeeping requirements as specified in § 60.5420b(c)(5) and (8) through (13), as applicable.

[45CSR16; 45CSR13, R13-2878 Conditions 4.1.1.e and 4.1.6; 40CFR§60.5385b] (M-1004 – M-1006, CM-1002 and CM-1003)

4.2. Monitoring Requirements

- 4.2.1. The permittee shall maintain 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.

[45CSR16; 45CSR13, R13-2878 Condition 4.2.1, 40 CFR §60.4243(b)(2)(ii)]

- 4.2.2. For each electric motor driven compressor identified as M-1004 – M-1006 and compressors connected to engines CM-1002 and CM-1003, the permittee must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410b(e) as applicable.

- (e) Reciprocating compressor affected facility. To demonstrate initial compliance with the GHG and VOC standards for each reciprocating compressor affected facility as required by § 60.5385b, you must comply with paragraphs (e)(1) through (7) of §60.5410b.

(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), 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).

(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), 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) 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), 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), 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).
- (5) If you comply with § 60.5385b(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), as applicable.
- (7) You must maintain the records as specified in § 60.5420b(c)(5) and (8) through (13) as applicable.

[45CSR16; 45CSR13, R13-2878 Condition 4.5.3; 40CFR§60.5410b(e)] (M-1004 – M-1006, CM-1002 and CM-1003)

- 4.2.3. For each electric motor driven compressor identified as M-1004 – M-1006 and compressors connected to engines CM-1002 and CM-1003, the permittee must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5415b(g) as applicable.

(g) Reciprocating compressor affected facility. For each reciprocating compressor affected facility complying with § 60.5385b(a) through (c), you must demonstrate continuous compliance according to paragraphs (g)(1), (5), and (6) of §60.5415b. For each reciprocating compressor affected facility complying with § 60.5385b(d)(1) or (2), you must demonstrate continuous compliance according to paragraphs (g)(2), (5) and (6) of §60.5415b. For each reciprocating compressor affected facility complying with § 60.5385b(d)(3), you must demonstrate continuous compliance according to paragraphs (g)(3) through (6) of §60.5415b.

- (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) 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) by using a control device, you also must comply with the requirements in paragraph (f) of §60.5415b.

(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), as applicable.

(6) You must maintain records as required in § 60.5420b(c)(5), (8) through (10), and (12), as applicable.

[45CSR16; 45CSR13, R13-2878 Condition 4.5.4; 40CFR§60.5415b(g)] (M-1004 – M-1006, CM-1002 and CM-1003)

4.3. Testing Requirements

- 4.3.1. The permittee must conduct performance testing on engines CM-1002, CM-1003, ~~CM-1004, CM-1005, CM-1006~~, C-102, and C-103 once every 8,760 hours of operation or once every three years, whichever comes first. Such testing shall be conducted in accordance with the applicable procedures in 40 CFR §60.4244 and Condition 3.3.1. Records of such testing shall be maintained in accordance with Condition 3.4.2. **[45CSR16; 45CSR13, R13-2878 Condition 4.3.1, 40CFR§60.4243(b)(2)(ii)]**

4.4. Recordkeeping Requirements

- 4.4.1. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. **[45CSR13, R13-2878 Condition 4.4.2]**

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

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

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

- e. The cause of the malfunction.

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

[45CSR13, R13-2878 Condition 4.4.3]

4.4.3. For each compressor connected to Engines ~~CM 1002, CM 1003, CM 1004, CM 1005, CM 1006~~, C-102 and C-103, the permittee shall maintain records of the following in accordance with Condition 3.4.2.

- a. Record the cumulative number of hours of operation since initial startup or the previous replacement of the reciprocating compressor rod packing, whichever is later;
- b. Record of the date of the most recent replacement of the rod packing.

[45CSR16; 45CSR13, R13-2878 Condition 4.4.4; 40 C.F.R. §§60.5385(a)(1), 60.5410(c)(1), 60.5415(c)(1), 60.5420(c)(3)(i) and (ii)]

4.4.4. The permittee shall maintain records of the monitoring as required in Condition 4.1.4. for each engine in accordance with Condition 3.4.2.

[45CSR13, R13-2878 Condition ~~4.4.5~~ 4.4.6]

4.4.5. Owners and operators of all stationary SI ICE must keep records of the following information:

- a. All notifications submitted to comply with this subpart 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 §60.4243(a)(2), documentation that the engine meets the emission standards.

[45CSR16; 40 C.F.R. §§60.4245(a)(1), (2), & (4)]

4.4.6. 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 following information:

- 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.

[45CSR16; 40 C.F.R. §60.4245(c)]

- 4.4.7. 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. **[45CSR16; 40 C.F.R. §60.4245(d)]**
- 4.4.8. For each reciprocating compressors affected facility, you must maintain records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in 40 C.F.R. §60.5385. **[45CSR16; 40 C.F.R. §60.5420(c)(3)(iii)] (C-102 and C-103)**
- 4.4.9 For each electric motor driven compressor identified as M-1004 – M-1006 and compressors connected to engines CM-1002 and CM-1003, the permittee shall comply with the recordkeeping requirements of 40CFR60 Subpart OOOOb, specifically §60.5420b(c)(5), and (8) through (13), as applicable.
- (c) You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (15) of §60.5420b. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart 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.
- (5) For each reciprocating compressor affected facility, you must maintain the records in paragraphs (c)(5)(i) through (x) and (c)(8) through (13) of §60.5420b, as applicable. If you comply with an alternative GHG and VOC standard under § 60.5398b, in lieu of the information specified in paragraph (c)(8) of §60.5420b, you must provide the information specified in § 60.5424b.
- (i) 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.
- (ii) Records of the date of installation of a rod packing emissions collection system and closed vent system as specified in § 60.5385b(d).
- (iii) 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.
- (iv) A description of the method used and the results of the volumetric flow rate measurement or emissions screening, as applicable.
- (v) Records for all flow meters, composition analyzers and pressure gauges used to measure volumetric flow rates as specified in paragraphs (c)(5)(v)(A) through (F).
- (A) Description of standard method published by a consensus-based standards organization or industry standard practice.
- (B) Records of volumetric flow rate calculations conducted according to paragraphs § 60.5385b(b) or (c), as applicable.

- (C) Records of manufacturer operating procedures and measurement methods.
- (D) Records of manufacturer's recommended procedures or an appropriate industry consensus standard method for calibration and results of calibration, recalibration, and accuracy checks.
- (E) 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.
- (F) Record of each initial calibration or a recalibration which failed to meet the required accuracy specification and the date of the successful recalibration.
- (vi) Date when performance-based volumetric flow rate is exceeded.
- (vii) 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.
- (viii) Identification of each reciprocating compressor placed on delay of repair because of rod packing or part unavailability and explanation for each delay of repair.
- (ix) 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.
- (x) 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.
- (8) Records of each closed vent system inspection required under § 60.5416b(a)(1) and (2) and (b) for your well, centrifugal compressor, reciprocating compressor, process controller, pump, storage vessel, and process unit equipment affected facility as required in paragraphs (c)(8)(i) through (iv) of §60.5420b.
 - (i) A record of each closed vent system inspection or no identifiable emissions monitoring survey. You must include an identification number for each closed vent system (or other unique identification description selected by you), the date of the inspection, and the method used to conduct the inspection (i.e., visual, AVO, OGI, Method 21 of appendix A-7 to this part).
 - (ii) For each defect or emissions detected during inspections required by § 60.5416b(a)(1) and (2) or (b), you must record the location of the defect or emissions; a description of the defect; the maximum concentration reading obtained if using Method 21 of appendix A-7 to this part; the indication of emissions detected by AVO if using AVO; the date of

detection; the date of each attempt to repair the emissions or defect; the corrective action taken during each attempt to repair the defect; and the date the repair to correct the defect or emissions is completed.

(iii) If repair of the defect is delayed as described in § 60.5416b(b)(6), you must record the reason for the delay and the date you expect to complete the repair.

(iv) Parts of the closed vent system designated as unsafe to inspect as described in § 60.5416b(b)(7) or difficult to inspect as described in § 60.5416b(b)(8), the reason for the designation, and written plan for inspection of that part of the closed vent system.

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

(i) A record of each cover inspection. You must include an identification number for each cover (or other unique identification description selected by you), the date of the inspection, and the method used to conduct the inspection (i.e., AVO, OGI, Method 21 of appendix A-7 to this part).

(ii) For each defect detected during the inspection you must record the location of the defect; a description of the defect, the date of detection, the maximum concentration reading obtained if using Method 21 of appendix A-7 to this part; the indication of emissions detected by AVO if using AVO; the date of each attempt to repair the defect; the corrective action taken during each attempt to repair the defect; and the date the repair to correct the defect is completed.

(iii) If repair of the defect is delayed as described in § 60.5416b(b)(6), you must record the reason for the delay and the date you expect to complete the repair.

(iv) Parts of the cover designated as unsafe to inspect as described in § 60.5416b(b)(7) or difficult to inspect as described in § 60.5416b(b)(8), the reason for the designation, and written plan for inspection of that part of the cover.

(10) 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.

(11) Records for each control device used to comply with the emission reduction standard in § 60.5377b(d) or (f) for associated gas wells, § 60.5380b(a)(1) or (9) for centrifugal compressor affected facilities, § 60.5385b(d)(2) for reciprocating compressor affected facilities, § 60.5390b(b)(3) for your process controller affected facility in Alaska, § 60.5393b(b)(3) for your pump affected facility, § 60.5395b(a)(2) for your storage vessel affected facility, § 60.5376b(g) for well affected facility gas well liquids unloading, or § 60.5400b(f) or 60.5401b(e) for your process equipment affected facility, as required in paragraphs (c)(11)(i) through (viii) of §60.5420b. 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 paragraphs (c)(11)(ix) of §60.5420b, in lieu of the records required by paragraphs (c)(11)(i) through (iv) and (vi) through (viii) of §60.5420b.

(i) For a control device tested under § 60.5413b(d) which meets the criteria in § 60.5413b(d)(11) and (e), keep records of the information in paragraphs (c)(11)(i)(A)

through (E) of §60.5420b, in addition to the records in paragraphs (c)(11)(ii) through (ix) of §60.5420b, as applicable.

(A) Serial number of purchased device and copy of purchase order.

(B) Location of the affected facility associated with the control device in latitude and longitude coordinates in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

(C) Minimum and maximum inlet gas flow rate specified by the manufacturer.

(D) Records of the maintenance and repair log as specified in § 60.5413b(e)(4), for all inspection, repair, and maintenance activities for each control device failing the visible emissions test.

(E) Records of the manufacturer's written operating instructions, procedures, and maintenance schedule to ensure good air pollution control practices for minimizing emissions.

(ii) For all control devices, keep records of the information in paragraphs (c)(11)(ii)(A) through (G) of §60.5420b, as applicable.

(A) Make, model, and date of installation of the control device, and identification of the affected facility controlled by the device.

(B) Records of deviations in accordance with § 60.5417b(g)(1) through (7), including a description of the deviation, the date and time the deviation began, the duration of the deviation, and the cause of the deviation.

(C) The monitoring plan required by § 60.5417b(c)(2).

(D) Make and model number of each continuous parameter monitoring system.

(E) Records of minimum and maximum operating parameter values, continuous parameter monitoring system data (including records that the pilot or combustion flame is present at all times), calculated averages of continuous parameter monitoring system data, and results of all compliance calculations.

(F) Records of continuous parameter monitoring system equipment performance checks, system accuracy audits, performance evaluations, or other audit procedures and results of all inspections specified in the monitoring plan in accordance with § 60.5417b(c)(2). Records of calibration gas cylinders, if applicable.

(G) Periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions and required monitoring system quality assurance or quality control activities Records of repairs on the monitoring system.

(iii) For each carbon adsorption system, records of the schedule for carbon replacement as determined by the design analysis requirements of § 60.5413b(c)(2) and (3) and records of each carbon replacement as specified in § 60.5412b(c)(1) and § 60.5415b(f)(1)(viii).

(iv) For enclosed combustion devices and flares, records of visible emissions observations as specified in paragraph (c)(11)(iv)(A) or (B) of §60.5420b.

- (A) Records of observations with Method 22 of appendix A-7 to this part, including observations required following return to operation from a maintenance or repair activity, which include: company, location, company representative (name of the person performing the observation), sky conditions, process unit (type of control device), clock start time, observation period duration (in minutes and seconds), accumulated emission time (in minutes and seconds), and clock end time. You may create your own form including the above information or use Figure 22-1 in Method 22 of appendix A-7 to this part.
- (B) If you monitor visible emissions with a video surveillance camera, location of the camera and distance to emission source, records of the video surveillance output, and documentation that an operator looked at the feed daily, including the date and start time of observation, the length of observation, and length of time visible emissions were present.
- (v) For enclosed combustion devices and flares, video of the OGI inspection conducted in accordance with § 60.5415b(f)(1)(x). Records documenting each enclosed combustion device and flare was visibly observed during each inspection conducted under § 60.5397b using AVO in accordance with § 60.5415b(f)(1)(x).
- (vi) For enclosed combustion devices and flares, records of each demonstration of the NHV of the inlet gas to the enclosed combustion device or flare conducted in accordance with § 60.5417b(d)(8)(iii). For each re-evaluation of the NHV of the inlet gas, records of process changes and explanation of the conditions that led to the need to re-evaluation the NHV of the inlet gas. For each demonstration, record information on whether the enclosed combustion device or flare has the potential to receive inert gases, and if so, the highest percentage of inert gases that can be sent to the enclosed combustion device or flare and the highest percent of inert gases sent to the enclosed combustion device or flare during the NHV demonstration. Records of periodic sampling conducted under § 60.5417b(d)(8)(iii)(G).
- (vii) For enclosed combustion devices and flares, if you use a backpressure regulator valve, the make and model of the valve, date of installation, and record of inlet flow rating. Maintain records of the engineering evaluation and manufacturer specifications that identify the pressure set point corresponding to the minimum inlet gas flow rate, the annual confirmation that the backpressure regulator valve set point is correct and consistent with the engineering evaluation and manufacturer specifications, and the annual confirmation that the backpressure regulator valve fully closes when not in open position.
- (viii) For enclosed combustion devices and flares, records of each demonstration required under § 60.5417b(d)(8)(iv).
- (ix) 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 paragraphs (c)(11)(ix)(A) through (H) of this section, in lieu of the records required by paragraphs (c)(11)(i) through (iv) and (c)(11)(vi) through (viii) of this section.
- (A) An identification of the alternative test method used.
- (B) Data recorded at the intervals required by the alternative test method.
- (C) Monitoring plan required by § 60.5417(i)(2).

(D) Quality assurance and quality control activities conducted in accordance with the alternative test method.

(E) If required by § 60.5412b(d)(4) to conduct visible emissions observations, records required by paragraph (c)(11)(iv) of §60.5420b.

(F) If required by § 60.5412b(d)(5) to conduct pilot or combustion flame monitoring, record indicating the presence of a pilot or combustion flame and periods when the pilot or combustion flame is absent.

(G) For each instance where there is a deviation of the control device in accordance with § 60.5417b(i)(6)(i) through (v), the date and time the deviation began, the duration of the deviation in hours, and cause of the deviation.

(H) Any additional information required to be recorded as specified by the Administrator as part of the alternative test method approval under § 60.5412b(d).

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

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

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

(13) A copy of each performance test submitted under paragraphs (b)(12) or (13) of this section.

[45CSR16; 45CSR13, R13-2878 Condition 4.4.5; 40CFR§§60.5420b(c)(5), and (8) through (13)] (M-1004 – M-1006, CM-1002 and CM-1003)

4.5. Reporting Requirements

4.5.1. The permittee shall submit annual compliance reports that indicates compliance with Conditions ~~4.1.1-e~~ 4.1.2.e. and 40 CFR §60.5385(a)(1) from the compressors connected to engines to the Director and Administrator in accordance with Conditions 3.5.1. and 3.5.3. The reporting period of such reports shall begin on October 15 and ends on October 14. Submission of reports must be made within 90 days from the end of the reporting period. The permittee may submit one report for multiple affected facilities under Subpart OOOO to Part 60. Such reports shall include the following information:

- a. The company name and address of the affected facility
- b. An identification of each affected facility being included in the annual report.
- c. Beginning and ending dates of the reporting period.
- d. 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.
- e. The records as required in Condition 4.4.3. for each affected compressor.
- f. Records of deviations specified in 40 C.F.R. §60.5420(c)(3)(iii) that occurred during the reporting period.

[45CSR16; 45CSR13, R13-2878 Condition 4.5.1, 40 CFR §§60.5420(b)(1) and (b)(4)]

4.5.2. For each electric motor driven compressor identified as M-1004 – M-1006 and compressors connected to engines CM-1002 and CM-1003, the permittee shall comply with the reporting requirements of 40CFR60 Subpart OOOOb, specifically §§60.5420b(b)(1) and (6), and (11) and (12), as applicable

(b) You must submit annual reports containing the information specified in paragraphs (b)(1) through (14) of §60.5420b following the procedure specified in paragraph (b)(15) of §60.5420b. You must submit performance test reports as specified in paragraph (b)(12) or (13) of §60.5420b, 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 paragraphs (b)(1) through (14) of §60.5420b. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period. You must submit the information in paragraph (b)(1)(v) of §60.5420b, as applicable, for your well affected facility which undergoes a change of ownership during the reporting period, regardless of whether reporting under paragraphs (b)(2) through (4) of §60.5420b is required for the well affected facility.

(1) The general information specified in paragraphs (b)(1)(i) through (v) of §60.5420b is required for all reports.

(i) 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.

(ii) An identification of each affected facility being included in the annual report.

(iii) Beginning and ending dates of the reporting period.

(iv) 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 (b)(1)(iv).

(v) Identification of each well affected facility for which ownership changed due to sale or transfer of ownership including the United States Well Number; the latitude and longitude coordinates of the well affected facility in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983; and the information in paragraph (b)(1)(v)(A) or (B) of §60.5420b, as applicable.

(A) The name and contact information, including the phone number, email address, and mailing address, of the owner or operator to which you sold or transferred ownership of the well affected facility identified in paragraph (b)(1)(v) of §60.5420b.

(B) The name and contact information, including the phone number, email address, and mailing address, of the owner or operator from whom you acquired the well affected facility identified in paragraph (b)(1)(v) of §60.5420b.

- (6) For each reciprocating compressor affected facility, the information specified in paragraphs (b)(6)(i) through (vii) of §60.5420b, as applicable.
- (i) The cumulative number of hours of operation since initial startup, since May 7, 2024, 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.
 - (ii) If applicable, for each deviation that occurred during the reporting period and recorded as specified in paragraph (c)(5)(i) of §60.5420b, 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.
 - (iii) A description of the method used and the results of the volumetric flow rate measurement or emissions screening, as applicable.
 - (iv) If complying with § 60.5385b(d)(1) or (2), the information in paragraphs (b)(11)(i) through (iv) of §60.5420b. If complying by routing emissions to a control device, as required in § 60.5385b(d)(2), the information in paragraph (b)(11)(v) of §60.5420b.
 - (v) Number and type of rod packing replacements/repairs on delay of repair and explanation for each delay of repair.
 - (vi) 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.
 - (vii) If you comply with an alternative GHG and VOC standard under § 60.5398b, in lieu of the information specified in paragraphs (b)(11)(i) and (ii) of §60.5420b, you must provide the information specified in § 60.5424b.
- (11) For each well, centrifugal compressor, reciprocating compressor, storage vessel, process controller, pump, or process unit equipment 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 paragraphs (b)(11)(i) through (v) of §60.5420b. For each reciprocating compressor, process controller, pump, storage vessel, or process unit equipment which uses a closed vent system to route to a process, you must submit the information in paragraphs (b)(11)(i) through (iv) of §60.5420b. For each centrifugal compressor, reciprocating compressor, and storage vessel equipped with a cover, you must submit the information in paragraphs (b)(11)(i) and (ii) of §60.5420b.
- (i) Dates of each inspection required under § 60.5416b(a) and (b).
 - (ii) Each defect or emissions identified during each inspection and the date of repair or the date of anticipated repair if the repair is delayed.
 - (iii) Date and time of each bypass alarm or each instance the key is checked out if you are subject to the bypass requirements of § 60.5416b(a)(4).
 - (iv) You must submit the certification signed by the qualified professional engineer or in-house engineer according to § 60.5411b(c) for each closed vent system routing to a control device or process in the reporting year in which the certification is signed.

(v) If you comply with the emissions standard for your well, centrifugal compressor, reciprocating compressor, storage vessel, process controller, pump, or process unit equipment affected facility with a control device, the information in paragraphs (b)(11)(v)(A) through (L) of §60.5420b, unless you use an enclosed combustion device or flare using an alternative test method approved under § 60.5412b(d). If you use an enclosed combustion device or flare using an alternative test method approved under § 60.5412b(d), the information in paragraphs (b)(11)(v)(A) through (C) and (L) through (P) of §60.5420b.

(A) Identification of the control device.

(B) Make, model, and date of installation of the control device.

(C) Identification of the affected facility controlled by the device.

(D) For each continuous parameter monitoring system used to demonstrate compliance for the control device, a unique continuous parameter monitoring system identifier and the make, model number, and date of last calibration check of the continuous parameter monitoring system.

(E) For each instance where there is a deviation of the control device in accordance with § 60.5417b(g)(1) through (3) or (g)(5) through (7) include the date and time the deviation began, the duration of the deviation in hours, the type of the deviation (*e.g.*, NHV operating limit, lack of pilot or combustion flame, condenser efficiency, bypass line flow, visible emissions), and cause of the deviation.

(F) For each instance where there is a deviation of the continuous parameter monitoring system in accordance with § 60.5417b(g)(4) include the date and time the deviation began, the duration of the deviation in hours, and cause of the deviation.

(G) For each visible emissions test following return to operation from a maintenance or repair activity, the date of the visible emissions test or observation of the video surveillance output, the length of the observation in minutes, and the number of minutes for which visible emissions were present.

(H) If a performance test was conducted on the control device during the reporting period, provide the date the performance test was conducted. Submit the performance test report following the procedures specified in paragraph (b)(12) of §60.5420b.

I) If a demonstration of the NHV of the inlet gas to the enclosed combustion device or flare was conducted during the reporting period in accordance with § 60.5417b(d)(8)(iii), an indication of whether this is a re-evaluation of vent gas NHV and the reason for the re-evaluation; the applicable required minimum vent gas NHV; if twice daily samples of the vent stream were taken, the number of hourly average NHV values that are less than 1.2 times the applicable required minimum NHV; if continuous NHV sampling of the vent stream was conducted, the number of hourly average NHV values that are less than the required minimum vent gas NHV; if continuous combustion efficiency monitoring was conducted using an alternative test method approved under § 60.5412b(d), the number of values of the combustion efficiency that were less than 95.0 percent; the resulting determination of whether NHV monitoring is required or not in accordance with § 60.5417b(d)(8)(iii)(D) or (H); and an indication of whether the enclosed combustion device or flare has the potential to receive inert gases, and if so, whether the sampling included periods where the highest percentage of inert gases were sent to the enclosed combustion device or flare.

- (J) If a demonstration was conducted in accordance with § 60.5417b(d)(8)(iv) that the maximum potential pressure of units manifolded to an enclosed combustion device or flare cannot cause the maximum inlet flow rate established in accordance with § 60.5417b(f)(1) or a flare tip velocity limit of 18.3 meter/second (60 feet/second) to be exceeded, an indication of whether this is a re-evaluation of the gas flow and the reason for the re-evaluation; the demonstration conducted; and applicable engineering calculations.
- (K) For each periodic sampling event conducted under § 60.5417b(d)(8)(iii)(G), provide the date of the sampling, the required minimum vent gas NHV, and the NHV value for each vent gas sample.
- (L) For each flare and enclosed combustion device, provide the date each device is observed with OGI in accordance with § 60.5415b(f)(1)(x) and whether uncombusted emissions were present. Provide the date each device was visibly observed during an AVO inspection in accordance with § 60.5415b(f)(1)(x), whether the pilot or combustion flame was lit at the time of observation, and whether the device was found to be operating properly.
- (M) An identification of the alternative test method used.
- (N) For each instance where there is a deviation of the control device in accordance with § 60.5417b(i)(6)(i) or (iii) through (v) include the date and time the deviation began, the duration of the deviation in hours, the type of the deviation (e.g., NHV_{cz} operating limit, lack of pilot or combustion flame, visible emissions), and cause of the deviation.
- (O) For each instance where there is a deviation of the data availability in accordance with § 60.5417b(i)(6)(ii) include the date of each operating day when monitoring data are not available for at least 75 percent of the operating hours.
- (P) If no deviations occurred under paragraphs (b)(11)(v)(N) or (O) of §60.5420b, a statement that there were no deviations for the control device during the annual report period.
- (Q) Any additional information required to be reported as specified by the Administrator as part of the alternative test method approval under § 60.5412b(d).
- (12) Within 60 days after the date of completing each performance test (see § 60.8) required by this subpart, 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 paragraph (d) of this section. 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.

[45CSR16; 45CSR13, R13-2878 Condition 4.5.2; 40CFR§§60.5420b(b)(1),(b)(6),(b)(11) and (b)(12)] (M-1004 – M-1006, CM-1002 and CM-1003)

4.6. Compliance Plan

4.6.1. None.

5.0 Source Specific Requirements Process Heaters [emission point ID(s): H-2741, H-2781, H-1741, H-1781, H-3741, H-4741, H-3781, H-5741, H-5782]

5.1. Limitations and Standards

- 5.1.1. **Heater MDHI.** The maximum design heat input (MDHI) for each of the heaters shall not exceed the following:

Emission Unit ID#	Heater Description ¹	MDHI (MMBtu/hr)
H-2741	Regeneration Gas Heater	9.60
H-2781	Heat Medium Oil Heater	26.32
H-1741	Regeneration Gas Heater	7.96
H-1781	Heat Medium Oil Heater	17.80
H-3741	Regeneration Gas Heater	9.60
H-4741	Regeneration Gas Heater	9.60
H-3781	Heat Medium Oil Heater	26.32
H-5741	Regeneration Gas Heater	9.60
H-5782	Heat Medium Oil Heater	62.99
Total Maximum Design Heat Input		179.79

1 - The heaters are fuel burning units per 45CSR§2-2.10.

[45CSR13, R13-2878 Condition 5.1.1]

- 5.1.2. The heaters in Table 5.1.1 shall not exhibit visible emissions greater than 10 percent opacity on a six minute block average.

[45CSR13, R13-2878 Condition 5.1.2, 45CSR§2-3.1.]

- 5.1.3. The permittee shall not exceed the following limits of annual emissions from combined heaters listed in Table 5.1.1.

- a. Emissions of NO_x shall not exceed 56.13 tpy.
- b. Emissions of CO shall not exceed 46.74 tpy.
- c. Emissions of VOCs shall not exceed 3.86 tpy.

Compliance with these emissions limits shall be satisfied by complying with Conditions 5.1.4., 5.1.5., and 5.1.6.

[45CSR13, R13-2878 Condition 5.1.3]

- 5.1.4. The fuel burning units listed in Table 5.1.1. shall be limited to using residue gas that complies with the requirements of Condition 3.1.9. Complying with this condition satisfies compliance with Condition 5.1.2. The use of residue gas in these emission units satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.1.e.

[45CSR13, R13-2878 Condition 5.1.4, 45CSR §2-8.4.b., 45CSR§2A-3.1.a., 45CSR§10-10.3., and 45CSR§10A-3.1.b.]

- 5.1.5. The permittee shall conduct tune-ups of all of the heaters that are listed in Table 5.1.1. that have a MDHI of 5.0 MMBtu/hr or greater once every three years in accordance with the following:
- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (permittee may 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;
 - b. 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;
 - c. 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);
 - d. Optimize total emissions of CO to a concentration not to exceed manufacturer's guaranteed concentration. This optimization should be consistent with the manufacturer's specifications, which includes the manufacturer's NO_x concentration specification of not to exceed manufacturer's guarantee or specified concentration.
 - e. Measure the concentrations in the effluent stream of NO_x and 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.

[45CSR13, R13-2878 Condition 5.1.5]

- 5.1.6. The annual heat input of each heater listed in Table 5.1.1. shall not exceed the value as listed in the table for the corresponding heater. Compliance with this limit shall be conducted on 12 month rolling total.

[45CSR13, R13-2878 Condition 5.1.6]

5.2. Monitoring Requirements

- 5.2.1. For each month, the permittee shall record the hours of operation and amount of fuel gas consumed by heaters listed in Table 5.1.1., and shall calculate the rolling yearly total of total heat input from the heaters. The permittee may record the total amount of fuel gas consumed by the heaters and other emission units on a combined basis. For other emission units not listed but fuel usage is included on the fuel meter, the permittee shall monitor the hours of operation of these sources to account for their fuel usage as well. Such records shall be maintained in accordance with Condition 3.4.2. of this permit.

[45CSR13, R13-2878 Condition 5.2.1; 45CSR16; 40 CFR §60.48c(g)(2) and 45CSR§2-8.3.c.]

5.3. Testing Requirements

- 5.3.1. None.

5.4. Recordkeeping Requirements

- 5.4.1. The permittee shall keep the following records in accordance with Condition 3.4.2. This includes but is not limited to the following information during the tune-up as required in Condition 5.1.5:

- a. The concentrations of CO and NO_x 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; and
- b. A description of any corrective actions taken as a part of the tune-up.

[45CSR13, R13-2878 Condition 5.4.1]

5.5. Reporting Requirements

- 5.5.1. None.

5.6. Compliance Plan

- 5.6.1. None.

6.0 Source Specific Requirements Flare

6.1 Limitations and Standards

6.1.1. The closed vent system that is used to route any pressure relief devices in VOC service at the facility that is either routed to control device flare (FL-991) or back to a process shall be installed, maintained and operated in accordance with the following requirements:

- a. The closed vent system shall be constructed of hard piping. The owner or operator shall comply with the following requirements;
 - i. Conduct an initial inspection according to the procedures in §60.485a(b); and
 - ii. Conduct annual visual inspections for visible, audible, or olfactory indications of leaks;

[40 CFR §60.5400(a), §60.482-10a(f)(1)]

- b. The closed vent system shall be free of leaks. A leaking component is defined as a measured instrument reading greater than 500 ppm above background or by visual inspection.

[40 CFR §60.5400(a), §60.482-10a(g)]

- c. Detected leaks shall be repaired as soon as practicable with the first attempt at repair shall be made within 5 calendar days after detecting the leak. Repair shall be completed no later than 15 calendar days after the leak is detected.

[40 CFR §60.5400(a), §60.482-10a(g)(1) & (g)(2)]

- d. Delay of repair (DOR) of the closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process shutdown or if the permittee determines that emissions resulting from the immediate repair would be greater than the fugitive emissions likely to result from the DOR. Repair of such equipment shall be complete by the end of the next process shutdown.

[40 CFR §60.5400(a), §60.482-10a(h)]

- e. If the permittee determines any parts of the closed vent system as unsafe to monitor by exposing the monitoring personnel to an imminent or potential danger, the permittee shall develop and implement a plan that allows for the monitoring of such components during safe-to-inspect times.

[40 CFR §60.5400(a), §60.482-10a(j)]

- f. Any parts of the closed vent system that are designated, as described in 40 CFR §60.482-10a(l)(2), as difficult to inspect are exempt from the inspection requirements of Condition 6.1.1.a.i. if the permittee complies with the requirements specified in the following:

- i. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface;
- ii. The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

- iii. The permittee shall develop a written plan that requires inspection of difficult to inspect equipment at least once every 5 years.

[40 CFR §60.5400(a), §60.482-10a(k)]

- g. Closed vent systems and control devices used to comply with provisions of Subpart OOOO to Part 60 shall be operated at all times when emissions may be vented to them.

[40 CFR §60.482-10a(m) & §60.5400(a)]

[45CSR13, R13-2878 Condition 6.1.1, 45CSR16]

- 6.1.2. Flare (FL-991) shall be designed and operated in accordance with the following:

- a. The flare shall be equipped with five (5) non-assisted flare tips and one (1) air-assisted flare tip.
[45CSR16, 40 CFR §60.18(c)(6) & §60.482-10a(d)]
- b. The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
[45CSR16, 40 CFR §60.18(c)(1)]
- c. The flare shall be operated with a flame present at all times whenever emissions may be vented to them.
[45CSR16, 40 CFR §60.18(c)(2)]
- d. The net heating value of the effluent going to the flare shall be 300 Btu per scf or greater.
[45CSR16, 40 CFR §§60.18(c)(3)(ii)]
- e. The exit velocity of each of the non-assisted flare tips shall not exceed 120.95 feet per second.
[45CSR16, 40 CFR §60.18(c)(4)(iii)]
- f. The exit velocity of the air-assisted flare tip shall not exceed 120.95 feet per second.
[40 CFR §60.485a(g)(3); 45CSR16]
- g. The maximum flow rate to the flare system shall not exceed 154.00 MMscf per year.
- h. The total emissions from the flare shall not exceed the following limits:
 - i. Emissions of NO_x shall not exceed 6.81 tpy.
 - ii. Emissions of CO shall not exceed 35.01 tpy.
 - iii. Emissions of VOC shall not exceed 15.15 tpy.

[45CSR13, R13-2878 Condition 6.1.2]

- 6.1.3. Visible particulate matter emissions from the flare (FL-991) shall not exceed twenty (20%) percent opacity.
[45CSR13, R13-2878 Condition 6.1.3; 45CSR§6-4.3.]

- 6.1.4. The provisions of permit condition 6.1.3 shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up.
[45CSR13, R13-2878 Condition 6.1.4; 45CSR§6-4.4.]

- 6.1.5. The flare (FL-991) including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR13, R13-2878 Condition 6.1.5; 45CSR§6-4.6.]
- 6.1.6. No person shall cause or allow particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

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

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

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

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

[45CSR13, R13-2878 Condition 6.1.6; 45CSR§6-4.1.]

- 6.1.7. The permittee will comply with the requirements of Section 2.12 of permit R13-2878 during emergency operation of the flare (FL-991).
[45CSR13, R13-2878 Condition 6.1.7]

6.2. Monitoring Requirements

- 6.2.1. In order to demonstrate compliance with the requirements of 6.1.2.c, the permittee shall monitor the presence or absence of a flare pilot flame using a thermocouple or any other equivalent device, except during SSM events.
[45CSR13, R13-2878 Condition 6.2.1; 45CSR16; 40 CFR §§60.18 (f)(2) and 60.485(g)(2)]
- 6.2.2. The permittee shall monitor the throughput of wet natural gas, which includes the purge gas, fed to the flare (FL-991) on a monthly basis.
[45CSR13, R13-2878 Condition 6.2.2]

6.3. Testing Requirements

- 6.3.1. In order to demonstrate compliance with the flare opacity requirements 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, R13-2878 Condition 6.3.1; 45CSR16; 40 CFR §§60.18(f)(1) and 60.485(g)(1)]

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

[45CSR13, R13-2878 Condition 6.3.2]

6.4. Recordkeeping Requirements

- 6.4.1. For the purpose of demonstrating compliance with section 6.1.2.c and 6.2.1, the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.

[45CSR13, R13-2878 Condition 6.4.1]

- 6.4.2. For the purpose of demonstrating compliance with section 6.1.2 and 6.3.2, the permittee shall maintain a record of the flare design evaluation. The flare design evaluation shall include, net heat value calculations, exit (tip) velocity calculations, and all supporting concentration calculations and other related information requested by the Director.

[45CSR13, R13-2878 Condition 6.4.2]

- 6.4.3. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of 6.2 and testing requirements of 6.3.

[45CSR13, R13-2878 Condition 6.4.3]

- 6.4.4. For the purpose of demonstrating compliance with section 6.1.2.b, the permittee shall maintain records of the visible emission opacity tests conducted per Section 6.3.1.

[45CSR13, R13-2878 Condition 6.4.4]

- 6.4.5. All records required under Section 6.4 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, R13-2878 Condition 6.4.5]

- 6.4.6. The permittee shall maintain a monthly record of the wet natural gas throughput for the flare (FL-991). Said records shall be maintained for a period of five (5) years on site or in a readily accessible off-site location maintained by the permittee. Said records shall be readily available to the Director of the Division of Air Quality or his/her duly authorized representative for expeditious inspection and review. Any records submitted to the agency pursuant to a requirement of this permit or upon request by the Director shall be certified by a responsible official.

[45CSR13, R13-2878 Condition 6.4.6]

- 6.4.7. The owner or operator shall record the information specified in paragraphs (a) through (e) of this section.

- a. Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
- b. Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
- c. For each inspection during which a leak is detected, a record of the information specified in § 60.486(c).
- d. For each inspection conducted in accordance with § 60.485(b) during which no leaks are detected, a

record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

- e. For each visual inspection conducted in accordance with 40 C.F.R. §60.482-10(f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

[45CSR16; 40 CFR §60.482-10(I)]

6.5. Reporting Requirements

- 6.5.1. If permittee is required by the Director to demonstrate compliance with section 6.1.1, then the permittee shall submit a testing protocol at least thirty (30) days prior to testing and shall submit a notification of the testing date at least fifteen (15) days prior to testing. The permittee shall submit the testing results within sixty (60) days of testing and provide all supporting calculations and testing data.

[45CSR13, R13-2878 Condition 6.5.1]

- 6.5.2. 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, R13-2878 Condition 6.5.2]

- 6.5.3. Any deviation(s) from the flare design and operation criteria in Section 6.1.2 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of discovery of such deviation.

[45CSR13, R13-2878 Condition 6.5.3]

- 6.5.4. The permittee shall report to the Director, the time, cause of event, estimate of emissions and corrective actions taken when the flare was used for an emergency at the facility.

[45CSR13, R13-2878 Condition 6.5.4]

6.6. Compliance Plan

- 6.6.1. None.

7.0 Source-Specific Requirements (Emergency Generators (G-1, G-3, G-4))

7.1 Limitations and Standards

7.1.1 Emission Standards

Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

[45CSR13, R13-2878 Condition 7.1.1.; 40CFR§60.4205(d); 45CSR16]

7.1.2. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[45CSR13, R13-2878 Condition 7.1.2; 40CFR§60.4206; 45CSR16]

7.1.3 Fuel Requirements

Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

[45CSR13, R13-2878 Condition 7.1.3; 40CFR§60.4207(b); 45CSR16]

7.1.4. In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.

[45CSR13, R13-2878 Condition 7.1.4; 40CFR§60.4208(h); 45CSR16]

7.1.5. If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

[45CSR13, R13-2878 Condition 7.1.5; 40CFR§60.4209(a); 45CSR16]

7.1.6. If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[45CSR13, R13-2878 Condition 7.1.6; 40CFR§60.4209(b); 45CSR16]

7.1.7. If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR part 1068, as they apply to you.

[45CSR13, R13-2878 Condition 7.1.7; 40CFR§60.4211(a); 45CSR16]

7.1.8. If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified

in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

[45CSR13, R13-2878 Condition 7.1.8; 40CFR§60.4211(c); 45CSR16]

- 7.1.9. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of §60.4211. In order for the engine to be considered an emergency stationary ICE under this subpart, 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 (f)(1) through (3) of §60.4211, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of §60.4211, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

[45CSR13, R13-2878 Condition 7.1.9; 40CFR§60.4211(f); 45CSR16]

- 7.1.10. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

- a. If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance 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, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[45CSR13, R13-2878 Condition 7.1.10; 40 CFR §60.4211(g)(1); 45CSR16]

- 7.1.11. Maximum emissions from the 53 hp diesel fired emergency generator, Generac MMG45 (G-1) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.41	0.10
Carbon Monoxide	0.43	0.11
Volatile Organic Compounds	0.41	0.10

[45CSR13, R13-2878 Condition 7.1.11]

- 7.1.12. Maximum emissions from each of the 58 hp diesel fired emergency generators, Generac MMG45 (G-3, G-4) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (ton/year)
Nitrogen Oxides	0.45	0.11
Carbon Monoxide	0.47	0.12
Volatile Organic Compounds	0.45	0.11

[45CSR13, R13-2878 Condition 7.1.12]

- 7.1.13. **Maximum Yearly Operation Limitation.** The maximum yearly hours of operation for each of the emergency generators (G-1, G-3, G-4) shall not exceed 500 hours per year. Compliance with the Maximum Yearly Operation Limitation shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the hours of operation at any given time during the previous twelve consecutive calendar months.

[45CSR13, R13-2878 Condition 7.1.13]

7.2. Monitoring Requirements

- 7.2.1. None.

7.3. Testing Requirements

7.3.1. Stack Testing

At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or other tests the Secretary may specify shall be conducted to determine compliance. For cause, the Secretary may request the permittee to install such stack gas monitoring devices as the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review on-site or such other reasonable location that the Secretary may specify. At the request of the Secretary, such data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports (45CSR13).

- a. 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.

[45CSR13, R13-2878 Condition 7.2.1]

7.3.2. Notification of Compliance Testing.

For any compliance test to be conducted by the permittee as set forth in this section, a test protocol shall be submitted to the Secretary at least thirty (30) calendar days prior to the scheduled date of the test. Such compliance test protocol shall be subject to approval by the Secretary. The permittee shall notify the Secretary at least fifteen (15) calendar days in advance of actual compliance test dates and times during which the test (or tests) will be conducted.

[45CSR13, R13-2878 Condition 7.2.2]

7.3.3. Alternative Test Methods

The Secretary may require a different test method or approve an alternative method in light of any technology advancements that may occur and may conduct such other tests as may be deemed necessary to evaluate air pollution emissions.

[45CSR13, R13-2878 Condition 7.2.3]

- 7.3.4. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of 40 C.F.R. §60.4212.

[45CSR13, R13-2878 Condition 7.2.3; 40CFR§60.4212; 45CSR16]

7.4. Recordkeeping Requirements

- 7.4.1. **Equipment Maintenance Records.** The permittee shall maintain maintenance records relating to failure and/or repair of the emergency generators. In the event of equipment or system failure, these records shall document the permittee's effort to maintain proper and effective operation of such equipment and/or systems.

[45CSR13, R13-2878 Condition 7.3.2]

- 7.4.2. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to nonemergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

[45CSR13, R13-2878 Condition 7.3.4; 40CFR§60.4214(b); 45CSR16]

- 7.4.3. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[45CSR13, R13-2878 Condition 7.3.5; 40CFR§60.4214(c); 45CSR16]

- 7.4.4. To demonstrate compliance with section 7.1.13, the permittee shall maintain records of the hours of operation of the emergency generators (G-1, G-3, G-4). 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, R13-2878 Condition 7.3.6]

7.5. Reporting Requirements

- 7.5.1. Compliance Testing

The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Section 7.0.

[45CSR13, R13-2878 Condition 7.3.3]

7.6. Compliance Plan

- 7.6.1. None.

8.0 Source-Specific Requirements (Blowdown Operations)

8.1 Limitations and Standards

- 8.1.1. The maximum waste/purge gas flow rate shall not exceed 154.0 MMscf per year for FL-991.
[45CSR13, R13-2878 Condition 9.1.1]
- 8.1.2. **Facility blowdowns to the flare.** Facility blowdowns of natural gas (NG) shall be controlled by the process flare (FL-991). The flare shall reduce the volatile organic compounds and hazardous air pollutants emissions by 98%. The flare shall meet the operating requirements in permit conditions 6.1.2 and 6.1.3.
[45CSR13, R13-2878 Condition 9.1.2]
- 8.1.3. **Larger compressor blowdowns to the atmosphere.** The amount of NG released to the atmosphere from compressors C-102 and C-103 shall not exceed an estimated 1,557,360 scf/year. Compliance with this limitation shall be determined by using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the amount of NG released to the atmosphere at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-2878 Condition 9.1.3]
- 8.1.4. **Smaller compressor blowdowns to the atmosphere.** The amount of natural gas released to the atmosphere from compressors CM-1006, CM-1002, CM-1003, CM-1004, and CM-1005 shall not exceed an estimated 729,900 scf/year. Compliance with this limitation shall be determined by using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the amount of NG released to the atmosphere at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-2878 Condition 9.1.4]
- 8.1.5. **VOC limits on blowdowns to the atmosphere.** Total VOC emissions from blowdown events shall not exceed the following limits:
- a. The combined blowdown events from C-102, C-103 shall not exceed 0.53 tons per year.
 - b. The combined blowdown events from CM-1002, CM-1003, CM-1004, CM-1005, CM-1006 shall not exceed 2.99 tons per year.
 - c. The facility blowdown events shall not exceed 8.99 tons per year.
 - d. The miscellaneous blowdown events shall not exceed 0.41 tons per year.
- [45CSR13, R13-2878 Condition 9.1.5]**
- 8.1.6. The permittee will comply with the requirements of Section 2.12 of permit R13-2878 during emergency operation of the flare (FL-991).
[45CSR13, R13-2878 Condition 9.1.6]

8.2 Monitoring Requirements

- 8.2.1. None.

8.3 Testing Requirements

- 8.3.1. None.

8.4. Recordkeeping Requirements

- 8.4.1. All records required under section 8.4 of this permit shall be kept in accordance with permit condition 3.4.2. **[45CSR13, R13-2878 Condition 9.2.1]**
- 8.4.2. To demonstrate compliance with permit conditions 8.1.1 – 8.1.5, the permittee shall maintain a record of the blowdown events and estimated volume per event (scf) on a monthly and rolling twelve month total. **[45CSR13, R13-2878 Condition 9.2.2]**

8.5. Reporting Requirements

- 8.5.1. Any exceedance of permit conditions 8.1.1 – 8.1.5 must be reported in writing or electronically in accordance with permit condition 3.5.3, to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the date of the exceedance, the estimate of VOC emissions released to the atmosphere as a result of the exceedance and any corrective measures taken or planned. **[45CSR13, R13-2878 Condition 9.3.1]**

8.6. Compliance Plan

- 8.6.1. None.

9.0 Source-Specific Requirements (40CFR60 Subpart OOOOa Requirements, Equipment Leak Standards)

9.1. Limitations and Standards

- 9.1.1. The permittee must be in compliance with the standards of 40 C.F.R. 60 Subpart OOOOa no later than August 2, 2016 or upon startup, whichever is later.
[45CSR13, R13-2878 Condition 10.1.1; 40 C.F.R. § 60.5370a(a)]
- 9.1.2. 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 CFR 60.8(c) do not apply to this subpart.
[45CSR13, R13-2878 Condition 10.1.2; 40 C.F.R. § 60.5370a(b)]
- 9.1.3. The permittee is exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.
[45CSR13, R13-2878 Condition 10.1.3; 40 C.F.R. § 60.5370a(c)]
- 9.1.4. **Equipment Leak Standards.**
This section applies to the group of all equipment, except compressors, within a process unit.
- a. You must comply with the requirements of §§60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in §60.5401a.
 - b. You may elect to comply with the requirements of §§60.483-1a and 60.483-2a, as an alternative.
 - c. You may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of methane and VOC at least equivalent to that achieved by the controls required in this subpart according to the requirements of §60.5402a.
 - d. You must comply with the provisions of §60.485a of this part except as provided in paragraph (f) of this section.
 - e. You must comply with the provisions of §§60.486a and 60.487a of this part except as provided in §§60.5401a, 60.5421a, and 60.5422a of this part.
 - f. You must use the following provision instead of §60.485a(d)(1): Each piece of equipment is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described in ASTM E169-93, E168-92, or E260-96 (incorporated by reference as specified in §60.17) must be used.
[45CSR13, R13-2878 Condition 10.1.4; 40 C.F.R. § 60.5400a]

9.1.5. Exceptions to the Equipment Leak Standards.

- a. You may comply with the following exceptions to the provisions of §60.5400a(a) and (b).
- b.
 - (1) Each pressure relief device in gas/vapor service may be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in §60.485a(b) except as provided in §60.5400a(c) and in paragraph (b)(4) of this section, and §60.482-4a(a) through (c) of subpart VVa.
 - (2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
 - (3)
 - (i) When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in §60.482-9a.
 - (ii) A first attempt at repair must be made no later than 5 calendar days after each leak is detected.
 - (4)
 - (i) Any pressure relief device that is located in a nonfractionating plant that is monitored only by non-plant personnel may be monitored after a pressure release the next time the monitoring personnel are on-site, instead of within 5 days as specified in paragraph (b)(1) of this section and §60.482-4a(b)(1) of subpart VVa.
 - (ii) No pressure relief device described in paragraph (b)(4)(i) of this section must be allowed to operate for more than 30 days after a pressure release without monitoring.
- c. Sampling connection systems are exempt from the requirements of §60.482-5a.
- d. Pumps in light liquid service, valves in gas/vapor and light liquid service, and pressure relief devices in gas/vapor service that are located at a nonfractionating plant that does not have the design capacity to process 283,200 standard cubic meters per day (scmd) (10 million standard cubic feet per day) or more of field gas are exempt from the routine monitoring requirements of §§60.482-2a(a)(1) and 60.482-7a(a), and paragraph (b)(1) of this section.
- e. Pumps in light liquid service, valves in gas/vapor and light liquid service, and pressure relief devices in gas/vapor service within a process unit that is located in the Alaskan North Slope are exempt from the routine monitoring requirements of §§60.482-2a(a)(1), 60.482-7a(a), and paragraph (b)(1) of this section.
- f. An owner or operator may use the following provisions instead of §60.485a(e):
 - (1) Equipment is in heavy liquid service if the weight percent evaporated is 10 percent or less at 150 °C (302 °F) as determined by ASTM Method D86-96 (incorporated by reference as specified in §60.17).
 - (2) Equipment is in light liquid service if the weight percent evaporated is greater than 10 percent at 150 °C (302 °F) as determined by ASTM Method D86-96 (incorporated by reference as specified in §60.17).
- g. An owner or operator may use the following provisions instead of §60.485a(b)(2): A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in §60.486a(e)(8). Divide these readings by the initial calibration values for each scale and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment

monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

[45CSR13, R13-2878 Condition 10.1.5; 40 C.F.R. § 60.5401a]

9.1.6. Alternative Emission Limitations for Equipment Leaks.

- a. If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in GHG and VOC emissions at least equivalent to the reduction in GHG and VOC emissions achieved under any design, equipment, work practice or operational standard, the Administrator will publish, in the Federal Register, a notice permitting the use of that alternative means for the purpose of compliance with that standard. The notice may condition permission on requirements related to the operation and maintenance of the alternative means.
- b. Any notice under paragraph (a) of this section must be published only after notice and an opportunity for a public hearing.
- c. The Administrator will consider applications under this section from either owners or operators of affected facilities, or manufacturers of control equipment.
- d. An application submitted under paragraph (c) of §60.5402a must meet the following criteria:
 - (1) The applicant must collect, verify and submit test data, covering a period of at least 12 months, necessary to support the finding in paragraph (a) of this section.
 - (2) The application must include operation, maintenance and other provisions necessary to assure reduction in methane and VOC emissions at least equivalent to the reduction in methane and VOC emissions achieved under the design, equipment, work practice or operational standard in paragraph (a) of this section by including the information specified in paragraphs (d)(2)(i) through (x) of this section.
 - (i) A description of the technology or process.
 - (ii) The monitoring instrument and measurement technology or process.
 - (iii) A description of performance based procedures (i.e. method) and data quality indicators for precision and bias; the method detection limit of the technology or process.
 - (iv) The action criteria and level at which a fugitive emission exists.
 - (v) Any initial and ongoing quality assurance/quality control measures.
 - (vi) Timeframes for conducting ongoing quality assurance/quality control.
 - (vii) Field data verifying viability and detection capabilities of the technology or process.
 - (viii) Frequency of measurements.
 - (ix) Minimum data availability.
 - (x) Any restrictions for using the technology or process.

- (3) The application must include initial and continuous compliance procedures including recordkeeping and reporting.

[45CSR13, R13-2878 Condition 10.1.6; 40 C.F.R. § 60.5402a]

9.2. Monitoring Requirements

- 9.2.1. You must determine initial compliance with the standards for each affected facility using the requirements in paragraph (f) of this section. The initial compliance period begins on August 2, 2016, or upon initial startup, whichever is later, and ends no later than 1 year after the initial startup date for your affected facility or no later than 1 year after August 2, 2016. The initial compliance period may be less than one full year.

- a. For affected facilities at onshore natural gas processing plants, initial compliance with the methane and VOC standards is demonstrated if you are in compliance with the requirements of §60.5400a.

[45CSR13, R13-2878 Condition 10.2.1; 40CFR§60.5410a(f)]

- 9.2.2. For affected facilities at onshore natural gas processing plants, continuous compliance with methane and VOC requirements is demonstrated if you are in compliance with the requirements of §60.5400a.

[45CSR13, R13-2878 Condition 10.3.1; 40CFR§60.5415a(f)]

9.3. Testing Requirements

- 9.3.1. None.

9.4. Recordkeeping Requirements

- 9.4.1. Additional Recordkeeping Requirements.

- a. You must comply with the requirements of paragraph (b) of §60.5421a in addition to the requirements of §60.486a.

- b. The following recordkeeping requirements apply to pressure relief devices subject to the requirements of §60.5401a(b)(1) of this subpart.

- (1) When each leak is detected as specified in §60.5401a(b)(2), a weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. The identification on the pressure relief device may be removed after it has been repaired.

- (2) When each leak is detected as specified in §60.5401a(b)(2), the information specified in paragraphs (b)(2)(i) through (x) of this section must be recorded in a log and shall be kept for 2 years in a readily accessible location:

- (i) The instrument and operator identification numbers and the equipment identification number.
- (ii) The date the leak was detected and the dates of each attempt to repair the leak.
- (iii) Repair methods applied in each attempt to repair the leak.
- (iv) “Above 500 ppm” if the maximum instrument reading measured by the methods specified in §60.5400a(d) after each repair attempt is 500 ppm or greater.

- (v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (vi) The signature of the owner or operator (or designate) whose decision it was that repair could not be affected without a process shutdown.
- (vii) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- (viii) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (ix) The date of successful repair of the leak.
- (x) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §60.482-4a(a). The designation of equipment subject to the provisions of §60.482-4a(a) must be signed by the owner or operator.

[45CSR13, R13-2878 Condition 10.4.1; 40CFR§60.5421a]

9.5. Reporting Requirements

9.5.1. Additional Reporting Requirements.

- a. You must comply with the requirements of paragraphs (b) and (c) of §60.5422 in addition to the requirements of §60.487a(a), (b), (c)(2)(i) through (iv), and (c)(2)(vii) through (viii). You must submit semiannual reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) Use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (<https://www3.epa.gov/ttn/chief/cedri/>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in §60.4. Once the form has been available in CEDRI for at least 90 days, you must begin submitting all subsequent reports via CEDRI. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.
- b. An owner or operator must include the following information in the initial semiannual report in addition to the information required in §60.487a(b)(1) through (4): Number of pressure relief devices subject to the requirements of §60.5401a(b) except for those pressure relief devices designated for no detectable emissions under the provisions of §60.482-4a(a) and those pressure relief devices complying with §60.482-4a(c).
- c. An owner or operator must include the following information in all semiannual reports in addition to the information required in §60.487a(c)(2)(i) through (vi):
 - (1) Number of pressure relief devices for which leaks were detected as required in §60.5401a(b)(2); and
 - (2) Number of pressure relief devices for which leaks were not repaired as required in §60.5401a(b)(3).

[45CSR13, R13-2878 Condition 10.4.2; 40CFR§60.5422a]

9.6. Compliance Plan

- 9.6.1. None.

10.0 Source-Specific Requirement (Additional Requirements)

10.1. Limitations and Standards

10.1.1. PORV Requirements. Any new Pilot-Operated Modulating Pressure Relief Valves (PORVs) shall have and operated Bottom Dome Vent Piping with the exception of the following:

- a. Atmospheric PORVs that are not otherwise required to be routed through a closed-vent system; or
- b. snap-action PORVs.

[45CSR13, R13-2878 Condition 11.1.1]

10.2. Monitoring Requirements

10.2.1. PORV Requirements. The permittee shall conduct Method 21 monitoring on all active PORVs on a quarterly basis unless the process unit has been permanently shut down. Leaks discovered from Method 21 monitoring shall be repaired as follows:

- a. By no later than five days after detecting a leak, the permittee shall perform a first attempt at repair of the PORV. By no later than 15 days after detection, the permittee shall perform a final attempt at repair of the PORV or place it on the DOR list. Repair Verification Monitoring shall be conducted after the repair of any leaks. If an instrument reading of 500 ppm or greater is measured using EPA Method 21, a leak is detected.
- b. For all PORVs placed on the DOR list, the permittee shall:
 1. Require sign-off from the relevant process unit supervisor or person of similar authority that the PORV is technically infeasible to repair without a process unit shutdown;
 2. Undertake monthly Method 21 monitoring of PORVs placed on the DOR list; and
 3. Repair the PORV within the time frame required by NSPS Subpart OOOO.

[45CSR13, R13-2878 Condition 11.1.2]

10.3. Testing Requirements

10.3.1. None.

10.4. Recordkeeping Requirements

10.4.1. PORV Requirements. For each leak identified, the permittee shall record the following information:

- a. The date the leak was identified and the screening value,
- b. The date of all repair attempts,
- c. The repair method used during each repair attempt,
- d. The date, time, and screening values for all re-monitoring events,
- e. Documentation of compliance with PORVs placed on the DOR list.

[45CSR13, R13-2878 Condition 11.1.3]

10.5. Reporting Requirements

10.5.1. None.

10.6. Compliance Plan

10.6.1. None.