West Virginia Department of Environmental Protection

Harold D. Ward
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Antero Midstream LLC
Castle Peak Compressor Station
R30-09500119-2024

Laura M. Crowder

Laura M. Crowder
Director, Division of Air Quality

Laura M. Crowder

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Date: 2024.04.22 13:47:50 -04'00'

Issued: April 22, 2024 • Effective: May 6, 2024
Expiration: April 22, 2029 • Renewal Application Due: October 22, 2028

Permit Number: **R30-09500119-2024**
Permittee: **Antero Midstream LLC**
Facility Name: **Castle Peak Compressor Station**
Permittee Mailing Address: **1615 Wynkoop Street, Denver, CO 80202**

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:	New Martinsville, Tyler County, West Virginia
Facility Mailing Address:	1615 Wynkoop Street, Denver, CO 80202
Telephone Number:	(303) 357-7310
Type of Business Entity:	LLC
Facility Description:	The Castle Peak Compressor Station separates, compresses, and dries field gas from surrounding production gas wells.
SIC Codes:	4922
UTM Coordinates:	516.522 km Easting • 4,377.786 km Northing • Zone 17

Permit Writer: Sarah Barron

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

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

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

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
C-100	1E	Caterpillar G3608 Compressor Engine #1 (4SLB)	2022	2,675 HP 2,749 HP [1]	OXCAT (1C)
C-200	2E	Caterpillar G3608 Compressor Engine #2 (4SLB)	2023	2,675 HP 2,749 HP [1]	OXCAT (2C)
C-300	3E	Caterpillar G3608 Compressor Engine #3 (4SLB)	2023	2,675 HP 2,749 HP [1]	OXCAT (3C)
C-400	4E	Caterpillar G3608 Compressor Engine #4 (4SLB)	2023	2,675 HP 2,749 HP [1]	OXCAT (4C)
C-500	5E	Caterpillar G3608 Compressor Engine #5 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (5C)
C-600	6E	Caterpillar G3608 Compressor Engine #6 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (6C)
C-700	7E	Caterpillar G3608 Compressor Engine #7 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (7C)
C-800	8E	Caterpillar G3608 Compressor Engine #8 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (8C)
C-900	9E	Caterpillar G3608 Compressor Engine #9 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (9C)
C-1000	10E	Caterpillar G3608 Compressor Engine #10 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (10C)
C-1100	11E	Caterpillar G3608 Compressor Engine #11 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (11C)
C-1200	12E	Caterpillar G3608 Compressor Engine #12 (4SLB)	2021	2,675 HP 2,749 HP [1]	OXCAT (12C)
GEN1	13E	Capstone C800 Natural Gas Microturbine Generator	2021	800 kW	None
DEHY1	14E	Dehydrator Still Vent #1	2021	300 mmscfd	TO-1 (16C)
DFLSH1	15E	Dehydrator Flash Tank #1	2021	300 mmscfd	DREB1 (16E) or TO-1 (16C)
DREB1	16E	Dehydrator Reboiler #1	2021	1.5 mmBTU/hr	None
DEHY2	17E	Dehydrator Still Vent #2	2021	300 mmscfd	TO-2 (17C)

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
DFLSH2	18E	Dehydrator Flash Tank #2	2021	300 mmscfd	DREB2 (19E) or TO-2 (17C)
DREB2	19E	Dehydrator Reboiler #2	2021	1.5 mmBTU/hr	None
T01	20E	Condensate Tank #1	2021	400 bbl	VRU-100 (14C) and VRU-200 (15C)
T02	21E	Condensate Tank #2	2021	400 bbl	VRU-100 (14C) and VRU-200 (15C)
T03	22E	Condensate Tank #3	2021	400 bbl	VRU-100 (14C) and VRU-200 (15C)
T04	23E	Settling Tank	2021	500 bbl	VRU-100 (14C) and VRU-200 (15C)
T05	24E	Produced Water Tank #1	2021	400 bbl	VRU-100 (14C) and VRU-200 (15C)
T06	25E	Produced Water Tank #2	2021	400 bbl	VRU-100 (14C) and VRU-200 (15C)
T07	26E	Produced Water Tank #3	2021	400 bbl	VRU-100 (14C) and VRU-200 (15C)
FUEL1	27E	Fuel Conditioning Heater #1	2021	0.75 mmBTU/hr	None
TO-1	28E	Thermal Oxidizer #1	2021	6.0 mmBTU/hr	16C
TO-2	29E	Thermal Oxidizer #2	2021	6.0 mmBTU/hr	17C
LDOUT1	30E	Produced Liquids Truck Loadout	2021	390 bbl/day	TO-1 (16C) or TO-2 (17C)
VENT1	31E	Venting Episodes	2021	Variable	None

[1] No less than eight units will be 2,675 HP, and no more than four units will be 2,749 HP.

Control Devices

Emission Unit	Pollutant	Control Device	Control Efficiency
Caterpillar G3608 Lean Burn 4-Stroke Compressor Engines (Eight of Emission Units C-100 through C-1200)	Carbon Monoxide	Oxidation Catalysts 1C to 12C	95%
	Volatile Organic Compounds (including Formaldehyde)		52%
	Formaldehyde		81%
Caterpillar G3608 A4 Uprate Lean Burn 4-Stroke Compressor Engines (Four of Emission Units C-100 through C-1200)	Carbon Monoxide	Oxidation Catalysts 1C to 12C	94%
	Volatile Organic Compounds (including Formaldehyde)		38%
	Formaldehyde		81%
Dehydrator Still Vents #1 and #2 (DEHY1 and DEHY2) Dehydrator Flash Tanks #1 and #2 (DFLSH1 and DFLSH2) Truck Loadout (LDOUT1)	Volatile Organic Compounds	Thermal Oxidizers rated at 6.0 mmBTU/hr TO-1 (16C) and TO-2 (17C)	98%
	Hazardous Air Pollutants		98%
Condensate Tanks (T01 to T03) Settling Tank (T04) Produced Water Tanks (T05 to T07)	Volatile Organic Compounds	Vapor Recovery Unit with Back-up Vapor Recovery Unit VRU-100 (14C) and VRU-200 (15C)	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
R13-3513D	October 12, 2023

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

2.3. Permit Expiration and Renewal

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

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

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

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

2.4. Permit Actions

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

2.5. Reopening for Cause

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

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

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

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

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

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

2.7. Minor Permit Modifications

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

2.8. Significant Permit Modification

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

2.9. Emissions Trading

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

2.10. Off-Permit Changes

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

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

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

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

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

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

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

[45CSR§30-5.9.]

2.11. Operational Flexibility

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

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

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

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

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

[45CSR§30-5.8.c.]

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

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Reserved

2.18. Federally-Enforceable Requirements

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

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

2.19. Duty to Provide Information

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

2.20. Duty to Supplement and Correct Information

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

2.21. Permit Shield

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

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

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

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

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

[45CSR§30-5.6.c.]

2.22. Credible Evidence

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

2.23. Severability

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

2.24. Property Rights

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

2.25. Acid Deposition Control

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

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

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

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

[45CSR§30-5.1.d.]

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

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

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

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

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

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

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

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

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

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

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

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

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

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

3.1.9. **Minor Source of Hazardous Air Pollutants (HAP).** HAP emissions from the facility shall be less than 10 tpy of any single HAP and 25 tpy of any combination of HAPs. Compliance with this condition shall ensure that the facility is a minor HAP source.
[45CSR13, R13-3513, 4.1.1.]

3.1.10. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.1. and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-3513, 4.1.2., 9.1.2., and 10.1.3.]

3.1.11. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated air pollutants. Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be replaced.
[45CSR13, R13-3513, 4.1.3.]

3.1.12. Only those emission units/sources as identified in Section 1.1., with the exception of any *de minimis* sources as identified under Table 45-13B of 45CSR13, are authorized at the permitted facility.
[45CSR13, R13-3513, 4.1.4.]

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

3.2. Monitoring Requirements

3.2.1. None.

3.3. Testing Requirements

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

in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

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

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

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

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

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

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

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

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

3.4. Recordkeeping Requirements

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

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

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

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

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-3513, 4.2.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.; 45CSR13, R13-3513, 3.4.1.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.1., the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-3513, 4.2.2., 9.3.2., and 10.3.2.]

3.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1., the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

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

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-3513, 4.2.3., 9.3.3., and 10.3.3.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

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

US EPA:

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

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

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

3.5.4. **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:	**US EPA:**
DEPAirQualityReports@wv.gov	R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **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. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds* – This rule is applicable to sources in Putnam County, Kanawha County, Cabell County, Wayne County, and Wood County. As the Castle Peak Compressor Station is located in Tyler County, the facility is not subject to 45CSR21.

b. **45CSR27** – *To Prevent and Control the Emissions of Toxic Air Pollutants* – This rule does not apply to the Castle Peak Compressor Station because, per 45CSR§27-2.4., the equipment used in the production and distribution of petroleum products is not considered a chemical processing unit, provided that such equipment does not produce or contact materials containing more than 5% benzene by weight.

c. **40 C.F.R. Part 60 Subpart Kb** – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984* – Per 40 C.F.R. §§60.110b(d) and (d)(4) vessels with a design capacity less than 1,589.874 m^3 (10,000 bbl) that are used for condensate stored, processed, or treated prior to custody transfer are not subject to Subpart Kb. Therefore, Subpart Kb is not applicable to the storage tanks T01 to T07.

d. **40 C.F.R. Part 60 Subpart GG** – *Standards of Performance for Stationary Gas Turbines* – Per 40 C.F.R. §60.330(a), this subpart applies to turbines with a heat input equal to or greater than 10.7 gigajoules per hour (10 mmBTU/hr). The facility's generator GEN1 consists of four microturbines with a heat input less than 10 mmBTU/hr. Therefore, Subpart GG is inapplicable to GEN1.

e. **40 C.F.R. Part 60 Subpart KKK** – *Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984 and On or Before August 23, 2011* – The Castle Peak Compressor

Station was constructed in 2021. Therefore, Subpart KKK is inapplicable to the Castle Peak Compressor Station as construction began after the date of applicability.

f. **40 C.F.R. Part 60 Subpart LLL** – *Standards of Performance for SO_2 Emissions from Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984 and On or Before August 23, 2011* – The Castle Peak Compressor Station was constructed in 2021. Therefore, Subpart LLL is inapplicable to the Castle Peak Compressor Station as construction began after the date of applicability.

g. **40 C.F.R. Part 60 Subpart KKKK** – *Standards of Performance for Stationary Combustion Turbines* – Per 40 C.F.R. §60.4305(a), this subpart applies to turbines with a heat input equal to or greater than 10.7 gigajoules per hour (10 mmBTU/hr), based on the higher heating value of the fuel. The facility's generator GEN1 consists of four individual microturbines, each with a heat input less than 10 mmBTU/hr. Therefore, Subpart KKKK is inapplicable to GEN1.

h. **40 C.F.R. Part 60 Subpart OOOO** – *Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011 and On or Before September 18, 2015* – The Castle Peak Compressor Station was constructed in 2021. Therefore, Subpart OOOO is inapplicable to the Castle Peak Compressor Station as construction began after the date of applicability.

i. **40 C.F.R. Part 63 Subpart HHH** – *National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities* – Per 40 C.F.R. §63.1270, a compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant is not considered a part of the natural gas transmission and storage source category. The Castle Peak Compressor Station is located prior to a natural gas processing plant and, therefore, is not subject to Subpart HHH.

j. **40 C.F.R. Part 63 Subpart EEEE** – *National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)* – Per 40 C.F.R. §§63.2334(c) and (c)(1), organic liquid distribution operations do not include the activities and equipment at oil and natural gas production field facilities. Therefore, Subpart EEEE is inapplicable to the Castle Peak Compressor Station.

k. **40 C.F.R. Part 63 Subpart YYYY** – *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines* – This subpart establishes standards for stationary combustion turbines located at major sources of HAPs. Per 40 C.F.R. §63.6175, only HAP emissions from glycol dehydration units, storage vessels with the potential for flash emissions, combustion turbines, and reciprocating internal combustion engines are aggregated for a major source determination for production field facilities. Thus, the Castle Peak Compressor Station is not a major source of HAPs and is not subject to Subpart YYYY.

l. **40 C.F.R. Part 63 Subpart DDDDD** – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* – This subpart establishes standards for boilers and process heaters located at major sources of HAPs. Per 40 C.F.R. §63.7575, only HAP emissions from glycol dehydration units and storage vessels with the potential for flash emissions shall be aggregated for a major source determination for natural gas production field facilities. Thus, the Castle Peak Compressor Station is not a major source of HAPs and is not subject to Subpart DDDDD.

4.0 Compressor Engines [Emission Points: 1E to 12E]

4.1. Limitations and Standards

4.1.1. a. Maximum emissions from each of the 2,675 HP natural gas-fired reciprocating engines equipped with oxidation catalysts, Caterpillar G3608 (eight units) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emissions (tpy)
Nitrogen Oxides	2.95	12.92
Carbon Monoxide	0.94	4.13
Volatile Organic Compounds (including Formaldehyde)	3.07	13.43
Formaldehyde	0.18	0.77

b. Maximum emissions from each of the 2,749 HP natural gas-fired reciprocating engines equipped with oxidation catalysts, Caterpillar G3608 A4 Uprate (four units) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emissions (tpy)
Nitrogen Oxides	3.03	13.27
Carbon Monoxide	0.97	4.25
Volatile Organic Compounds (including Formaldehyde)	2.30	10.09
Formaldehyde	0.18	0.80

[45CSR13, R13-3513, 5.1.1.]

4.1.2. Requirements for the use of Catalytic Reduction Devices (OXCAT (1C through 12C)):

a. Lean-burn natural gas engine(s) equipped with oxidation catalyst air pollution control devices shall be fitted with a closed-loop automatic air-to-fuel ratio feedback controller to ensure emissions of regulated pollutants do not exceed the limits in Condition 4.1.1. for any engine/oxidation catalyst combination under varying load. The closed-loop, automatic air-to-fuel ratio controller shall control a fuel metering valve to ensure a lean-rich mixture.

b. The automatic air-to-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 over rich air-to-fuel ratio situation which results in performance degradation or failure of the catalyst element.

c. No person shall knowingly:

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

2. Install any part or component when the principal effect of the part or component is to bypass, defeat, or render inoperative any air pollution control device or auxiliary air pollution control device installed subject to the requirements of this permit; or

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

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

[45CSR13, R13-3513, 5.1.2.]

4.1.3. The provisions of 40 C.F.R. Part 60 Subpart JJJJ are applicable to the stationary spark ignition (SI) internal combustion engines (ICE) C-100 to C-1200, as specified below. For the purposes of Subpart JJJJ, the date that construction commences is the date the engine is ordered by the permittee.

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

1. On or after July 01, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP).

[45CSR13, R13-3513, 11.1.1.; 45CSR16; 40 C.F.R. §§60.4230(a), (a)(4), and (a)(4)(i)]

4.1.4. The following emission standards from Table 1 to Subpart JJJJ of Part 60 apply to the compressor engines C-100 through C-1200:

Engine Type and Fuel	**Maximum Engine Power**	**Manufacture Date**	**Emission Standards**[1]					
			g/HP-hr			ppmvd at 15% O_2		
			NO_X	CO	VOC[2]	NO_X	CO	VOC[2]
Non-Emergency SI Natural Gas	HP ≥ 500	07/01/2010	1.0	2.0	0.7	82	270	60

[1] Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15% O_2.

[2] For purposes of Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[45CSR13, R13-3513, 11.1.2.; 45CSR16; 40 C.F.R. §60.4233(e); Table 1 to Subpart JJJJ of Part 60]

4.1.5. The permittee must operate and maintain the stationary compressor engines C-100 through C-1200 so that each engine achieves the emission standards as required in 40 C.F.R. §60.4233 over the entire life of the engine.
[45CSR13, R13-3513, 11.1.3.; 45CSR16; 40 C.F.R. §60.4234]

4.1.6. After July 01, 2009, the permittee may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in 40 C.F.R. §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 01, 2010.
[45CSR13, R13-3513, 11.2.1.; 45CSR16; 40 C.F.R. §60.4236(b)]

4.1.7. The requirements of 40 C.F.R. §60.4236 do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.
[45CSR13, R13-3513, 11.2.2.; 45CSR16; 40 C.F.R. §60.4236(e)]

4.1.8. The permittee may operate the engines C-100 through C-1200 using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the emission standards of 40 C.F.R. §60.4233.
[45CSR13, R13-3513, 11.3.2.; 45CSR16; 40 C.F.R. §60.4243(e)]

4.1.9. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The air-to-fuel ratio controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
[45CSR13, R13-3513, 11.3.3.; 45CSR16; 40 C.F.R. §60.4243(g)]

4.1.10. If a new or reconstructed stationary RICE located at an area source of HAP emissions is started up after January 18, 2008, the permittee must comply with the applicable emission limitations and operating limitations in 40 C.F.R. Part 63 Subpart ZZZZ upon startup of the affected source.
[45CSR13, R13-3513, 14.1.1.; 45CSR34; 40 C.F.R. §63.6595(a)(7)]

4.1.11. *Stationary RICE subject to Regulation under 40 C.F.R. Part 60*. An affected source that meets any of the criteria in 40 C.F.R. §§63.6590(c)(1) through (c)(7) must meet the requirements of 40 C.F.R. Part 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. Part 60 Subpart JJJJ for spark ignition engines. No further requirements apply for such engines under Subpart ZZZZ.

The permittee meets the criteria for 40 C.F.R. §63.6590(c)(1), which is for new or reconstructed stationary RICE located at an area source. The permittee must meet the requirements of 40 C.F.R. Part 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. Part 60 Subpart JJJJ.

[45CSR13, R13-3513, 14.1.2.; 45CSR34; 40 C.F.R. §§63.6590(c) and (c)(1)]

4.2. Monitoring Requirements

4.2.1. **Catalytic Oxidizer Control Devices ((OXCAT (1C through 12C)).** The permittee shall regularly inspect, properly maintain, and/or replace catalytic reduction devices and auxiliary air pollution control devices to ensure functional and effective operation of the engine's physical and operational design. The permittee shall

ensure proper operation, maintenance, and performance of catalytic reduction devices and auxiliary air pollution control devices by:

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

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

[45CSR13, R13-3513, 5.2.1.]

4.2.2. For the stationary SI ICE C-100 through C-1200, the permittee must demonstrate compliance with Condition 4.1.4. according to the following:

a. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Condition 4.1.4. and according to Condition 4.3.1. and the requirements specified below:

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

[45CSR13, R13-3513, 11.3.1.; 45CSR16; 40 C.F.R. §§60.4243(b), (b)(2), and (b)(2)(ii)]

4.3. Testing Requirements

4.3.1. In order to demonstrate compliance with Condition 4.2.2.a.1., the permittee shall conduct performance tests following the procedures in paragraphs a. through f. of this condition.

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

b. The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 C.F.R. §60.8(c). If the permittee's stationary SI ICE is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine.

c. The permittee must conduct three separate test runs for each performance test required in this condition, as specified in 40 C.F.R. §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

d. To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 1 of this condition:

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

Where:
ER = Emission rate of NO_X in g/HP-hr
C_d = Measured NO_X concentration in parts per million by volume (ppmv)
1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20° Celsius
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis
T = Time of test run, in hours
HP-hr = Brake work of the engine, horsepower-hour (HP-hr)

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

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

Where:
ER = Emission rate of CO in g/HP-hr
C_d = Measured CO concentration in parts per million by volume (ppmv)
1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20° Celsius
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis
T = Time of test run, in hours
HP-hr = Brake work of the engine, horsepower-hour (HP-hr)

f. For the purposes of 40 C.F.R. Part 60 Subpart JJJJ, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this condition:

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

Where:
ER = Emission rate of VOC in g/HP-hr
C_d = VOC concentration measured as propane in ppmv
1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20° Celsius
Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis
T = Time of test run, in hours
HP-hr = Brake work of the engine, horsepower-hour (HP-hr)

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

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

Where:
RF_i = Response factor of compound i when measured with EPA Method 25A
C_{Mi} = Measured concentration of compound i in ppmv as carbon
C_{Ai} = True concentration of compound i in ppmv as carbon

$$C_{icorr} = RF_i \times C_{imeas} \quad \text{Eq. 5}$$

Where:
C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon
C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon

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

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

[45CSR13, R13-3513, 11.4.1.; 45CSR16; 40 C.F.R. §60.4244]

4.4. Recordkeeping Requirements

4.4.1. The permittee shall maintain records of the hours of operation of each engine. Such records shall be kept in accordance with Condition 3.4.2.
[45CSR13, R13-3513, 5.4.1.]

4.4.2. To demonstrate compliance with Condition 4.1.2., the permittee shall maintain records of all catalytic reduction device maintenance. Said records shall be kept in accordance with Condition 3.4.2.
[45CSR13, R13-3513, 5.4.2.]

4.4.3. The permittee must keep records of the information in paragraphs a. through c. of this section.

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

b. Maintenance conducted on each engine.

c. Documentation that C-100 through C-1200 meet the emission standards set forth in Condition 4.1.4.

[45CSR13, R13-3513, 11.5.1.a.; 45CSR16; 40 C.F.R. §§60.4245(a), (a)(1), (a)(2), and (a)(4)]

4.5. Reporting Requirements

4.5.1. The permittee shall provide notification to the DAQ in accordance with permit condition 3.5.3. of the engines that will have a reflash chip installed and which engines will not have a reflash chip installed. This notification must be submitted within 30 days of any installation.
[45CSR13, R13-3513, 5.5.2.]

4.5.2. The permittee must submit a copy of each performance test as conducted in Condition 4.3.1. within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference – see 40 C.F.R. §60.17) to measure VOC require reporting of

all QA/QC data. For Method 18, report results from Sections 8.4 and 11.1.1.4; for Method 320 report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
[45CSR13, R13-3513, 11.5.1.c.; 45CSR16; 40 C.F.R. §60.4245(d)]

4.6. Compliance Plan

4.6.1. None.

5.0 40 C.F.R. Part 60 Subpart OOOOa Requirements for Reciprocating Compressors C-100 to C-1200

5.1. Limitations and Standards

5.1.1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall maintain and operate any affected facility under 40 C.F.R. Part 60 Subpart OOOOa, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown, and malfunctions provided for in 40 C.F.R. §60.8(c) do not apply to 40 C.F.R. Part 60 Subpart OOOOa.
[45CSR16; 40 C.F.R. §60.5370a(b)]

5.1.2. The permittee must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the standards in paragraphs a. through d. of this condition for each reciprocating compressor affected facility.

a. The permittee must replace the reciprocating compressor rod packing according to either paragraph a.1. or a.2. of this condition, or the permittee must comply with paragraph a.3. of this condition.

1. On or before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of the reciprocating compressor affected facility, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

2. Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.

3. Collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of 40 C.F.R. §§60.5411a(a) and (d).

b. The permittee must demonstrate initial compliance with the standards that apply to reciprocating compressor affected facilities as required by Condition 5.2.1.

c. The permittee must demonstrate continuous compliance with the standards that apply to reciprocating compressor affected facilities as required by Condition 5.2.2.

d. The permittee must perform the reporting as required by Condition 5.5.1. and the recordkeeping as required by Condition 5.4.1.

[45CSR13, R13-3513, 12.1.1.; 45CSR16; 40 C.F.R. §60.5385a]

5.2. Monitoring Requirements

5.2.1. The permittee must determine initial compliance with the standards for each affected facility using the requirements in this condition. The initial compliance period begins upon initial startup and ends no later than one year after the initial startup date for the affected facility. The initial compliance period may be less than one full year.

a. To achieve initial compliance with the standards for each reciprocating compressor affected facility, the permittee must comply with paragraphs a.1. through a.4. of this condition.

1. If complying with paragraphs a.1. or a.2. of Condition 5.1.2., during the initial compliance period, the permittee must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.

2. If complying with Condition 5.1.2.a.3., the permittee must operate the rod packing emissions collection system under negative pressure and route emissions to a process through a closed vent system that meets the requirements of 40 C.F.R. §§60.5411a(a) and (d).

3. The permittee must submit the initial annual report for the reciprocating compressor as required in paragraphs a. and b. of Condition 5.5.1.

4. The permittee must maintain the records as specified in Condition 5.4.1.a. for each reciprocating compressor affected facility.

[45CSR13, R13-3513, 12.2.1.; 45CSR16; 40 C.F.R. §§60.5410a and 60.5410a(c)]

5.2.2. For each reciprocating compressor affected facility complying with paragraph a.1. or a.2. of Condition 5.1.2., the permittee must demonstrate continuous compliance according to paragraphs a. through c. of this condition. For each reciprocating compressor affected facility complying with Condition 5.1.2.a.3., the permittee must demonstrate continuous compliance according to paragraph d. of this condition.

a. The permittee must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

b. The permittee must submit the annual reports as required in paragraphs a. and b. of Condition 5.5.1. and maintain records as required in Condition 5.4.1.a.

c. The permittee must replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

d. The permittee must operate the rod packing emissions collection system under negative pressure and continuously comply with the cover and closed vent requirements in 40 C.F.R. §§60.5416a(a) and (b).

[45CSR13, R13-3513, 12.3.1.; 45CSR16; 40 C.F.R. §60.5415a(c)]

5.3. Testing Requirements

5.3.1. None.

5.4. Recordkeeping Requirements

5.4.1. The permittee must maintain the records identified as specified in 40 C.F.R. §60.7(f) and in this condition, as applicable. All records required by 40 C.F.R. Part 60 Subpart OOOOa must be maintained either on-site or at the nearest local field office for at least five years. Any records required to be maintained by Subpart OOOOa that are submitted electronically via the EPA's CDX may be maintained in electronic format.

a. For each reciprocating compressor affected facility, the permittee must maintain the records in paragraphs a.1. through a.3. of this condition.

1. Records of the cumulative number of hours of operation or number of months since initial startup or the previous replacement of the reciprocating compressor rod packing, whichever is later. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

2. Records of the date and time of each reciprocating compressor rod packing replacement, or date of installation of a rod packing emissions collection system and closed vent system as specified in Condition 5.1.2.a.3.

3. Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in Condition 5.1.2., including the date and time the deviation began, duration of the deviation, and a description of the deviation.

b. Records of each closed vent system inspection required under 40 C.F.R. §§60.5416a(a)(1) and (a)(2) for reciprocating compressors.

c. A record of each cover inspection required under 40 C.F.R. §60.5416a(a)(3) for reciprocating compressors.

d. If the reciprocating compressors are subject to the bypass requirements of 40 C.F.R. §60.5416a(a)(4), a record of each inspection or a record of each time the key is checked out or a record of each time the alarm is sounded.

e. If the reciprocating compressors are subject to the closed vent system no detectable emissions requirements of 40 C.F.R. §60.5416a(b), a record of the monitoring conducted in accordance with §60.5416a(b).

f. For each closed vent system routing to a control device or process, the records of the assessment conducted according to 40 C.F.R. §60.5411a(d):

1. A copy of the assessment conducted according to §60.5411a(d)(1);

2. A copy of the certification according to §60.5411a(d)(1)(i); and

3. The owner or operator shall retain copies of all certifications, assessments and any related records for a period of five years, and make them available if directed by the delegated authority.

[45CSR13, R13-3513, 12.4.3.; 45CSR16; 40 C.F.R. §§60.5420a(c), (c)(3), (c)(6) to (c)(9), and (c)(17)]

5.5. Reporting Requirements

5.5.1. The permittee must submit annual reports containing the information specified in paragraphs a., b., and d. of this condition, as applicable. The permittee must submit annual reports following the procedure specified in paragraph c. of this condition. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to Condition 5.2.1. Subsequent annual reports are due no later than the same date each year as the initial annual report. The permittee may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs a. and b. of this condition. Annual reports may coincide with Title V reports as long as all the required elements of the annual report are included. The permittee may arrange with the Administrator a common schedule on which reports required by 40 C.F.R. Part 60 may be submitted as long as the schedule does not extend the reporting period.

a. The general information specified below:

1. The company name, facility site name associated with the affected facility, and the address of the affected facility.

2. An identification of each affected facility being included in the annual report.

3. Beginning and ending dates of the reporting period.

4. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

b. The information specified below for each reciprocating compressor affected facility:

1. The cumulative number of hours of operation or the number of months since initial startup or since the previous reciprocating compressor rod packing replacement, whichever is later. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

2. Records of deviations specified in Condition 5.4.1.a.3. that occurred during the reporting period, the date and time the deviation began, duration of the deviation and a description of the deviation.

c. The permittee must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) The permittee must use the appropriate electronic report in CEDRI for Subpart OOOOa 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 Subpart OOOOa is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 C.F.R §60.4. Once the form has been available in CEDRI for at least 90 calendar days, the permittee must begin submitting

all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in Subpart OOOOa, regardless of the method in which the reports are submitted.

d. The permittee must submit the certification signed by the qualified professional engineer according to 40 C.F.R. §60.5411a(d) for each closed vent system routing to a control device or process.

[45CSR13, R13-3513, 12.4.2. and 12.4.3.; 45CSR16; 40 C.F.R. §§60.5420a(b), (b)(1), (b)(4), (b)(11), and (b)(12)]

5.6. Compliance Plan

5.6.1. None.

6.0 40 C.F.R. Part 60 Subpart OOOOa Requirements for Fugitive Emissions Components

6.1. Limitations and Standards

6.1.1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown, and malfunctions provided for in 40 C.F.R. §60.8(c) do not apply to 40 C.F.R. Part 60 Subpart OOOOa.
[45CSR16; 40 C.F.R. §60.5370a(b)]

6.1.2. For each affected facility under 40 C.F.R. §60.5365a(j), the permittee must reduce GHG emissions (in the form of a limitation on emissions of methane) and VOC emissions by complying with the requirements of paragraphs a. through j. of this condition. These requirements are independent of the closed vent system and cover requirements in 40 C.F.R. §60.5411a.

a. The permittee must monitor all fugitive emissions components, as defined in 40 C.F.R. §60.5430a, in accordance with paragraphs b. through g. of this condition. The permittee must repair all sources of fugitive emissions in accordance with paragraph h. of this condition. The permittee must keep records in accordance with paragraph i. of this condition and report in accordance with paragraph j. of this condition. For the purposes of this condition, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 parts per million (ppm) or greater using Method 21 of Appendix A-7 to 40 C.F.R. Part 60.

b. The permittee must develop an emissions monitoring plan that covers the collection of fugitive emissions components at compressor stations within each company-defined area in accordance with paragraphs c. and d. of this condition.

c. Fugitive emissions monitoring plans must include the elements specified in paragraphs c.1. through 8. of this condition, at a minimum.

1. Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by paragraphs f. and g. of this condition.

2. Technique for determining fugitive emissions (i.e., Method 21 of Appendix A-7 to 40 C.F.R. Part 60 or optical gas imaging).

3. Manufacturer and model number of fugitive emissions detection equipment to be used.

4. Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emissions components that are unsafe to repair. The repair schedule must meet the requirements of paragraph h. of this condition at a minimum.

5. Procedures and timeframes for verifying fugitive emissions component repairs.

6. Records that will be kept and the length of time records will be kept.

7. If using optical gas imaging, the plan must also include the elements specified in paragraphs c.7.i. through vii. of this condition.

   i. Verification that the optical gas imaging equipment meets the specifications of paragraphs c.7.i.a. and b. of this condition. This verification is an initial verification and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitive emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.

      a. The optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.

      b. The optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 g/hr from a quarter inch diameter orifice.

   ii. Procedure for a daily verification check.

   iii. Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.

   iv. Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.

   v. Procedures for conducting surveys, including the items specified in paragraphs c.7.v.a. through c. of this condition.

      a. How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.

      b. How the operator will deal with adverse monitoring conditions, such as wind.

      c. How the operator will deal with interferences (e.g., steam).

   vi. Training and experience needed prior to performing surveys.

   vii. Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

8. If using Method 21 of Appendix A-7 of 40 C.F.R. Part 60, the plan must also include the elements specified in paragraphs c.8.i. and ii. of this condition. For the purposes of complying with the fugitive emissions monitoring program using Method 21, a fugitive emission is defined as an instrument reading of 500 ppm or greater.

   i. Verification that monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 C.F.R. Part 60, Appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If the permittee wishes to use an analyzer other than a FID-based instrument, the

permittee must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to the compound of interest).

ii. Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 C.F.R. Part 60, Appendix A-7, including Section 8.3.1.

d. Each fugitive emissions monitoring plan must include the elements specified in paragraphs d.1. through 4. of this condition, at a minimum, as applicable.

1. Sitemap.

2. A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences.

3. If using Method 21, the plan must include a list of the fugitive emissions components to be monitored and the method for determining the location of fugitive emissions components to be monitored in the field (e.g., tagging, identification on a process and instrumentation diagram, etc.).

4. The fugitive emissions monitoring plan must include the written plan developed for all of the fugitive emissions components designated as difficult-to-monitor in accordance with paragraph g.2. of this condition, and the written plan for fugitive emissions components designated as unsafe-to-monitor in accordance with g.3. of this condition.

e. Each monitoring survey shall observe each fugitive emissions component, as defined in 40 C.F.R. §60.5430a, for fugitive emissions.

f. The permittee must conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each collection of fugitive emissions components at the new compressor station. For a modified collection of fugitive emissions components at a compressor station, the initial monitoring survey must be conducted within 60 days of the modification.

g. A monitoring survey of each collection of fugitive emissions components at a compressor station must be performed at the frequencies specified in paragraph g.1. of this condition, with the exceptions noted in paragraphs g.2. and g.3. of this condition.

1. A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.

2. Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of paragraphs g.2.i. through iv. of this condition.

i. A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs b., c., and d. of this condition.

ii. The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.

iii. The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.

iv. The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.

3. Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of paragraphs g.3.i. through iv. of this condition.

i. A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs b., c., and d. of this condition.

ii. The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.

iii. The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.

iv. The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

h. Each identified source of fugitive emissions shall be repaired or replaced in accordance with paragraphs h.1. and 2. of this condition. For fugitive emissions components also subject to the repair provisions of 40 C.F.R. §§60.5416a(b)(9) through (12) and (c)(4) through (7), those provisions apply instead to those closed vent system and covers, and the repair provisions of paragraphs h.1. and 2. of this condition do not apply to those closed vent systems and covers.

1. Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.

2. If the repair or 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 replacement must be completed during the next scheduled compressor station shutdown, after a planned vent blowdown, or within 2 years, whichever is earliest.

3. Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions.

i. For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions.

ii. For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken and must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).

iii. Operators that use Method 21 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in paragraphs h.3.iii.a. and b. of this condition.

a. A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in Section 8.3.3 of Method 21 are used.

b. Operators must use the Method 21 monitoring requirements specified in paragraph c.8.ii. of this condition or the alternative screening procedures specified in Section 8.3.3 of Method 21.

iv. Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in paragraphs h.3.iv.a. and b. of this condition.

a. A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.

b. Operators must use the optical gas imaging monitoring requirements specified in paragraph c.7. of this condition.

i. Records for each monitoring survey shall be maintained as specified in Condition 6.4.1.

j. Annual reports shall be submitted for each collection of fugitive emissions components at a compressor station that include the information specified in Condition 6.5.1.b. Multiple collection of fugitive emissions components at a compressor station may be included in a single annual report.

** Compliance with these streamlined standards assures compliance with the VOC and methane standards of 40 C.F.R. Part 60 Subpart OOOOa.*

[45CSR13, R13-3513, 13.1.1.; 45CSR16; 40 C.F.R. §§60.5397a(a) through (e), (f)(2), (g), (g)(2) through (4), and (h) through (j)]

6.2. Monitoring Requirements

6.2.1. To achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a compressor station, the permittee must comply with paragraphs a. through e. of this

condition. The initial compliance period begins upon initial startup and ends no later than one year after the initial startup date for the affected facility. The initial compliance period may be less than one full year.

a. The permittee must develop a fugitive emissions monitoring plan as required in 40 C.F.R. §§60.5397a(b), (c), and (d).

b. The permittee must conduct an initial monitoring survey as required in 40 C.F.R. §60.5397a(f).

c. The permittee must maintain the records specified in 40 C.F.R. §60.5420a(c)(15).

d. The permittee must repair each identified source of fugitive emissions for each affected facility as required in 40 C.F.R. §60.5397a(h).

e. The permittee must submit the initial annual report for each collection of fugitive emissions components at a compressor station as required in 40 C.F.R. §60.5420a(b)(1) and (7).

[45CSR13, R13-3513, 13.2.1. and 13.2.2.; 45CSR16; 40 C.F.R. §§60.5410a and 60.5410a(j)]

6.2.2. For each collection of fugitive emissions components at a compressor station, the permittee must demonstrate continuous compliance with the fugitive emission standards specified in 40 C.F.R. §60.5397a according to paragraphs a. through d. of this condition.

a. The permittee must conduct periodic monitoring surveys as required in 40 C.F.R. §60.5397a(g).

b. The permittee must repair or replace each identified source of fugitive emissions as required in 40 C.F.R. §60.5397a(h).

c. The permittee must maintain records as specified in 40 C.F.R. §60.5420a(c)(15).

d. The permittee must submit annual reports for collection of fugitive emissions components at a compressor station as required in 40 C.F.R. §§60.5420a(b)(1) and (7).

[45CSR13, R13-3513, 13.3.1.; 45CSR16; 40 C.F.R. §60.5415a(h)]

6.3. Testing Requirements

6.3.1. None.

6.4. Recordkeeping Requirements

6.4.1. The permittee must maintain the records identified as specified in 40 C.F.R. §60.7(f) and this condition for each collection of fugitive emissions components at a compressor station. All records required by 40 C.F.R. Part 60 Subpart OOOOa must be maintained either on-site or at the nearest local field office for at least 5 years. Any records required to be maintained by Subpart OOOOa that are submitted electronically via the EPA's CDX may be maintained in electronic format.

a. The fugitive emissions monitoring plan as required in paragraphs b. through d. of Condition 6.1.2.

b. The records of each monitoring survey as follows:

1. Date of the survey.

2. Beginning and end time of the survey.

3. Name of the operator(s) performing the survey. The permittee must note the training and experience of the operator.

4. Monitoring instrument used.

5. When optical gas imaging is used to perform the survey, one or more digital photographs or videos, captured from the optical gas imaging instrument used for conduct of monitoring, of each required monitoring survey being performed. The digital photograph must include the date the photograph was taken and the latitude and longitude of the collection of fugitive emissions components at a compressor station imbedded within or stored with the digital file. As an alternative to imbedded latitude and longitude within the digital file, the digital photograph or video may consist of an image of the monitoring survey being performed with a separately operating GPS device within the same digital picture or video, provided the latitude and longitude output of the GPS unit can be clearly read in the digital image.

6. Fugitive emissions component identification when Method 21 of 40 C.F.R. Part 60, Appendix A-7 is used to perform the monitoring survey.

7. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.

8. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.

9. Documentation of each fugitive emission, including the information specified in paragraphs b.9.i. through xii. of this condition.

i. Location.

ii. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.

iii. Number and type of components for which fugitive emissions were detected.

iv. Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emissions components monitored.

v. Instrument reading of each fugitive emissions component that requires repair when Method 21 is used for monitoring.

vi. Number and type of fugitive emissions components that were not repaired as required in Condition 6.1.2.h.

vii. Number and type of components that were tagged as a result of not being repaired during the monitoring survey when the fugitive emissions were initially found as required in paragraph h.3.ii. of Condition 6.1.2.

viii. If a fugitive emissions component is not tagged, a digital photograph or video of each fugitive emissions component that could not be repaired during the monitoring survey when the fugitive emissions were initially found as required in paragraph h.3.ii. of Condition 6.1.2. The digital photograph or video must clearly identify the location of the component that must be repaired. Any digital photograph or video required under this paragraph can also be used to meet the requirements under paragraph b.5. of this condition, as long as the photograph or video is taken with the optical gas imaging instrument, includes the date and the latitude and longitude are either imbedded or visible in the picture.

ix. Repair methods applied in each attempt to repair the fugitive emissions components.

x. Number and type of fugitive emissions components placed on delay of repair and explanation for each delay of repair.

xi. The date of successful repair of the fugitive emissions component.

xii. Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

** Compliance with these streamlined standards assures compliance with the VOC and methane standards of 40 C.F.R. Part 60 Subpart OOOOa.*

[45CSR13, R13-3513, 13.4.3.; 45CSR16; 40 C.F.R. §§60.5420a(c), (c)(15), and (c)(15)(i) to (ii)]

6.5. Reporting Requirements

6.5.1. The permittee must submit annual reports containing the information specified in paragraphs a. and b. of this condition. The permittee must submit annual reports following the procedure specified in paragraph c. of this condition. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to Condition 6.2.1. Subsequent annual reports are due no later than the same date each year as the initial annual report. The permittee may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs a. and b. of this condition. Annual reports may coincide with Title V reports as long as all the required elements of the annual report are included. The permittee may arrange with the Administrator a common schedule on which reports required by 40 C.F.R. Part 60 may be submitted as long as the schedule does not extend the reporting period.

a. The general information specified below is required for all reports:

1. The company name, facility site name associated with the affected facility, and address of the affected facility;

2. An identification of each affected facility being included in the annual report;

3. Beginning and ending dates of the reporting period; and

4. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

b. For the collection of fugitive emissions components at each compressor station within the company-defined area, the records of each monitoring survey including the information specified in paragraphs b.1. through 12. of this condition.

1. Date of the survey.

2. Beginning and end time of the survey.

3. Name of operator(s) performing the survey. If the survey is performed by optical gas imaging, the permittee must note the training and experience of the operator.

4. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.

5. Monitoring instrument used.

6. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.

7. Number and type of components for which fugitive emissions were detected.

8. Number and type of fugitive emissions components that were not repaired as required in Condition 6.1.2.h.

9. Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emissions components monitored.

10. The date of successful repair of the fugitive emissions component.

11. Number and type of fugitive emissions components placed on delay of repair and explanation for each delay of repair.

12. Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

c. The permittee must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) The permittee must use the appropriate electronic report in CEDRI for 40 C.F.R. Part 60 Subpart OOOOa 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).

** Compliance with these streamlined standards assures compliance with the VOC and methane standards of 40 C.F.R. Part 60 Subpart OOOOa.*

[45CSR13, R13-3513, 13.4.2.; 45CSR16; 40 C.F.R. §§60.5420a(b), (b)(1), (b)(7), and (b)(11)]

6.6. Compliance Plan

6.6.1. None.

7.0 Microturbine Generator [Emission Point: 13E]

7.1. Limitations and Standards

7.1.1. The GEN1 unit shall be a Capstone C800 Standard 800 kWe (output) Microturbine consisting of four (4) 200 kWe units and shall only be fired by natural gas.
[45CSR13, R13-3513, 6.1.1.]

7.1.2. The maximum emissions from the Microturbine shall not exceed the limits in the following table:

Pollutant	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emissions (tpy)
Nitrogen Oxides	0.32	1.40
Carbon Monoxide	0.88	3.85
Volatile Organic Compounds	0.08	0.35
PM_{10}	0.054	0.24
Formaldehyde	0.01	0.03

[45CSR13, R13-3513, 6.1.2.]

7.1.3. As the annual emissions are based on 8,760 hours of operation, there are no annual limits on hours of operation or natural gas combusted on an annual basis.
[45CSR13, R13-3513, 6.1.3.]

7.1.4. Maintenance of the microturbine shall be performed in accordance with manufacturer recommendations or in accordance with a site-specific maintenance plan.
[45CSR13, R13-3513, 6.1.4.]

7.2. Monitoring Requirements

7.2.1. None.

7.3. Testing Requirements

7.3.1. None.

7.4. Recordkeeping Requirements

7.4.1. In order to demonstrate compliance with Condition 7.1.4., the permittee shall maintain records of all maintenance performed on the microturbine. Said records shall be kept in accordance with Condition 3.4.2.
[45CSR13, R13-3513, 6.3.1.]

7.5. Reporting Requirements

7.5.1. None.

7.6. Compliance Plan

7.6.1. None.

8.0 Dehydration Units [Emission Points: 14E, 15E, 17E, and 18E]

8.1. Limitations and Standards

8.1.1. **Maximum Throughput Limitation.** The maximum dry natural gas throughput to each TEG dehydration unit/still column (DEHY1, DEHY2) shall not exceed 300 million standard cubic feet per day.
[45CSR13, R13-3513, 7.1.1.]

8.1.2. Each TEG dehydration unit/still column (DEHY1, DEHY2) shall be controlled by a dedicated thermal oxidizer device (TO-1, TO-2) at all times. The TEG dehydration flash tank (DFLSH1, DFLSH2) emissions shall be controlled by recycling the flash tank emissions back to the flame zone of the reboiler or shall be controlled by routing the flash tank emissions to the thermal oxidizer. Maximum emissions from each thermal oxidizer (TO-1, TO-2) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emissions (tpy)
Volatile Organic Compounds	2.80	12.27
Benzene	0.03	0.11

[45CSR13, R13-3513, 7.1.2.]

8.1.3. Vapors being controlled by the thermal oxidizer shall be routed to the thermal oxidizer at all times.
[45CSR13, R13-3513, 7.1.3.]

8.1.4. Each thermal oxidizer shall be operated with a flame present at all times that vapors are being routed to it as determined by the methods specified in Condition 8.2.1.
[45CSR13, R13-3513, 7.1.4.]

8.1.5. Each thermal oxidizer shall be operated according to the manufacturer's specifications for residence time and minimum combustion chamber temperature. The thermal oxidizers must be operated with a minimum combustion zone temperature of 1,450°F.
[45CSR13, R13-3513, 7.1.5.; 45CSR§30-5.1.c.]

8.1.6. Each thermal oxidizer shall be operated at all times when emissions are vented to them. To ensure compliance with this condition, the permittee shall monitor in accordance with Condition 8.2.1.
[45CSR13, R13-3513, 7.1.6. and 7.1.7.]

8.1.7. Each thermal oxidizer shall be designed for and operated with no visible emissions as determined by the methods specified in Condition 8.3.1. of this operating permit except for periods not to exceed a total of five minutes during any two consecutive hours.
[45CSR13, R13-3513, 7.1.8.]

8.1.8. The permittee shall monitor the thermal oxidizer(s) to ensure that they are operated and maintained in conformance with their designs.
[45CSR13, R13-3513, 7.1.9.]

8.1.9. Any source that determines it is not a major source but has actual emissions of 5 tons per year or more of a single HAP, or 12.5 tons per year or more of any combination of HAPs (i.e., 50 percent of the major source thresholds), shall update its major source determination within one year of the prior determination and each year thereafter, using gas composition data measured during the preceding twelve months.
[45CSR34; 40 C.F.R. §63.760(c)]

8.1.10. The permittee is exempt from the requirements of 40 C.F.R. §63.764(d) if the criteria listed in paragraph a. is met, except that the records of the determination of these criteria must be maintained as required in 40 C.F.R. §63.774(d)(1).

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

[45CSR34; 40 C.F.R. §§63.764(e), (e)(1), and (e)(1)(ii)]

8.1.11. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[45CSR34; 40 C.F.R. §63.764(j)]

8.1.12. No person shall cause or allow particulate matter to be discharged from either of the thermal oxidizers TO-1 or TO-2 into the open air in excess of 1.94 lbs/hr.
[45CSR§6-4.1.]

8.1.13. No person shall cause or allow emission of smoke into the atmosphere from any incinerator which is twenty percent (20%) opacity or greater.
[45CSR§6-4.3.]

8.1.14. The provisions of Condition 8.1.13. shall not apply to smoke which is less than forty percent (40%) opacity, for a period or periods aggregating no more than eight (8) minutes per start-up, or six (6) minutes in any sixty minute period for stoking operations.
[45CSR§6-4.4.]

8.1.15. No person shall cause or allow the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5.]

8.1.16. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
[45CSR§6-4.6.]

8.2. Monitoring Requirements

8.2.1. In order to demonstrate compliance with the requirements of Condition 8.1.4., the permittee shall monitor the presence or absence of a flame using a thermocouple or any other equivalent device, except during SSM events.
[45CSR13, R13-3513, 7.2.1.]

8.2.2. The permittee shall monitor the throughput of dry natural gas fed to the dehydration system on a monthly basis for each glycol dehydration unit.
[45CSR13, R13-3513, 7.2.2.]

8.3. Testing Requirements

8.3.1. In order to demonstrate compliance with the thermal oxidizer opacity requirements of Conditions 8.1.7. and 8.1.13., the permittee shall conduct a Method 22 opacity test for at least two hours. This test shall demonstrate no visible emissions are observed for more than a total of 5 minutes during any 2 consecutive hour period using 40 C.F.R. Part 60 Appendix A, Method 22. The permittee shall conduct this test within 180 days 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 C.F.R. Part 60 Appendix A, Method 22 or from the lecture portion of 40 C.F.R. Part 60 Appendix A, Method 9 certification course.
[45CSR13, R13-3513, 7.3.1.]

8.3.2. The Director may require the permittee to conduct a thermal oxidizer compliance assessment to demonstrate compliance with Condition 8.1.2. 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 C.F.R. 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, R13-3513, 7.3.2.]

8.3.3. In order to demonstrate compliance with the minor source status of hazardous air pollutants required by Condition 3.1.9., upon request of the Director, the permittee shall demonstrate compliance with the HAP emissions thresholds using GLYCalc Version 3.0 or higher. The permittee shall sample in accordance with GPA Method 2166 and analyze the samples utilizing the extended GPA Method 2286 as specified in the GRI-GLYCalc V4 Technical Reference User Manual and Handbook.
[45CSR13, R13-3513, 7.3.3.]

8.3.4. **Determination of glycol dehydration benzene emissions.** In order to demonstrate that the benzene emissions are less than 1 tpy, the permittee shall determine the actual average benzene emissions using the procedure in the paragraph below. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research

Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).
[45CSR13, R13-3513, 7.3.4.; 45CSR34; 40 C.F.R. §§63.772(b), (b)(2), and (b)(2)(i)]

8.3.5. Use of the ProMax model, Version 5.0 or higher, as an alternative to the GLYCalc model is subject to the following caveats.

Inputs to the ProMax, Version 5.0 or above, software shall include the parameters listed below, which must be representative of the actual operating conditions of the glycol dehydration unit:

a. Wet gas flowrate

b. Wet gas composition (dry basis)

c. Wet gas water content (if unknown, can assume a worst-case of 100% saturation)

d. Wet gas (absorber) temperature

e. Wet gas (absorber) pressure

f. Glycol circulation rate (or dry gas water content or glycol circulation ratio)

g. Dry gas water content

h. Lean glycol water content

i. Gas pump volume ratio (when gas injection pump is used)

j. Reboiler temperature

k. Flash tank parameters (when installed)

    1. Temperature

    2. Pressure

l. Control device parameters (when installed)

    1. Combustion device destruction efficiency

    2. Condenser temperature and pressure

m. Stripping gas (if used)

    1. Type (dry gas, flash gas, nitrogen)

    2. Flowrate

[45CSR13, R13-3513, 7.3.5.]

8.3.6. Affected facilities using this alternative (ProMax as an alternative to GLYCalc under 40 C.F.R. Part 63 Subpart HH) for their affected glycol dehydration units must notify the responsible agency before use of the alternative and notification should include a copy of this letter. Facilities must include a copy of this letter with each report presenting results using the ProMax software.
[45CSR13, R13-3513, 7.3.6.]

8.3.7. Once a facility chooses to use ProMax as an alternative to GLYCalc under one or more of the 40 C.F.R. Part 63 Subpart HH provisions listed above, the facility must continue to use ProMax in meeting the provision(s) until the owner/operator receives approval from this office for use of a new alternative method or the responsible agency for use of any other options in Subpart HH, including returning to the use of GLYCalc (see 40 C.F.R. §63.7(f)(5)).
[45CSR13, R13-3513, 7.3.7.]

8.3.8. At such reasonable times as the Secretary may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 C.F.R. Part 60 Appendix A, Method 5 or other equivalent U.S. EPA approved method approved by the Secretary, in exhaust gases. Such tests shall be conducted in such manner as the Secretary may specify and be filed on forms and in a manner acceptable to the Secretary. The Secretary may, at the Secretary's option, witness or conduct such stack tests. Should the Secretary exercise his or her option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for the test equipment and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

The Secretary may conduct such other tests as the Secretary may deem necessary to evaluate air pollution emissions other than those noted above.

[45CSR§§6-7.1. and -7.2.]

8.4. Recordkeeping Requirements

8.4.1. For the purpose of demonstrating compliance with Conditions 8.1.4. and 8.2.1., the permittee shall maintain records of the times and duration of all periods the pilot flame was absent.
[45CSR13, R13-3513, 7.4.1.]

8.4.2. For the purpose of demonstrating compliance with Conditions 8.1.5. and 8.3.1., the permittee shall maintain a record of the thermal oxidizer design evaluation.
[45CSR13, R13-3513, 7.4.2.]

8.4.3. For the purpose of demonstrating compliance with the requirements set forth in Conditions 8.1.7., 8.1.13., and 8.3.1., the permittee shall maintain records of the visible emissions tests conducted in accordance with Condition 8.3.1.
[45CSR13, R13-3513, 7.4.3. and 7.4.5.]

8.4.4. The permittee shall document and maintain the corresponding records specified by the on-going monitoring requirements of Conditions 8.2.1. and 8.2.2.
[45CSR13, R13-3513, 7.4.4.]

8.4.5. For the purpose of demonstrating compliance with the minor source status of hazardous air pollutants required by Condition 3.1.9., the permittee shall maintain a record of all potential-to-emit (PTE) HAP

calculations for the entire affected facility. These records shall include the natural gas compressor engines and ancillary equipment.
[45CSR13, R13-3513, 7.4.6.]

8.4.6. For the purpose of demonstrating compliance with Conditions 8.1.1. and 8.2.2., the permittee shall maintain a record of the dry natural gas throughput through the dehydration system.
[45CSR13, R13-3513, 7.4.7.]

8.4.7. To demonstrate that the permittee is exempt from the requirements of 40 C.F.R. §63.764(d) if the actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere is less than 0.90 megagram per year (1 tpy), as determined by the procedures specified in 40 C.F.R. §63.772(b)(2) and Condition 8.3.4. of this operating permit, records of the actual average benzene emissions (in terms of benzene emissions per year) shall be maintained.
[45CSR13, R13-3513, 7.4.8.; 45CSR34; 40 C.F.R. §§63.764(e), 63.774(d)(1) and (d)(1)(ii)]

8.4.8. All records required under Section 8.4. shall be kept in accordance with Condition 3.4.2.
[45CSR13, R13-3513, 7.4.9.]

8.4.9. To demonstrate compliance with Condition 8.1.5., the permittee shall maintain a copy of the manufacturer's operation and maintenance specifications on-site.
[45CSR§30-5.1.c.]

8.5. Reporting Requirements

8.5.1. If the permittee is required by the Director to demonstrate compliance with Condition 8.3.2., 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, R13-3513, 7.5.1.]

8.5.2. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. 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 the opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
[45CSR13, R13-3513, 7.5.2.]

8.5.3. Any deviation(s) from the thermal oxidizer design and operation criteria in Condition 8.1.5. 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, R13-3513, 7.5.3.]

8.5.4. The TEG dehydration unit is located at an area source and meets the criteria in 40 C.F.R. §63.764(e)(1)(ii). Therefore, the permittee is exempt from the reporting requirements for area sources specified in 40 C.F.R. §§63.775(c)(1) through (7).
[45CSR34; 40 C.F.R. §§63.775(c) and (c)(8)]

8.6. Compliance Plan

8.6.1. None.

9.0 Reboilers and Fuel Conditioning Heater [Emission Points: 16E, 19E, and 27E]

9.1. Limitations and Standards

9.1.1. **Maximum Design Heat Input.** The maximum design heat input for each of the TEG Dehydration Unit Reboilers (DREB1 and DREB2) shall not exceed 1.5 mmBTU/hr.
[45CSR13, R13-3513, 8.1.1.]

9.1.2. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten percent (10%) opacity based on a six-minute block average.
[45CSR13, R13-3513, 8.1.2.; 45CSR§2-3.1.]

9.2. Monitoring Requirements

9.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct Method 9 emission observations for the purpose of demonstrating compliance with Condition 9.1.2. Method 9 shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A.
[45CSR13, R13-3513, 8.2.1.]

9.3. Testing Requirements

9.3.1. Compliance with the visible emission requirements of Condition 9.1.2. shall be determined in accordance with 40 C.F.R. Part 60 Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of Condition 9.1.2. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR13, R13-3513, 8.3.1.; 45CSR§2-3.2.]

9.4. Recordkeeping Requirements

9.4.1. All records required under Section 9.4. shall be kept in accordance with Condition 3.4.2. of this operating permit.
[45CSR13, R13-3513, 8.4.1.]

9.4.2. The permittee shall maintain records of all monitoring data required by Condition 9.2.1. documenting the date and time of each visible emission check, the emission point or equipment/source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9.
[45CSR13, R13-3513, 8.4.2.]

9.5. Reporting Requirements

9.5.1. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40 C.F.R. 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, R13-3513, 8.5.1.]

9.6. Compliance Plan

9.6.1. None.

10.0 Condensate Storage Tanks, Settling Tank, and Produced Water Storage Tanks [Emission Points: 20E to 26E]

10.1. Limitations and Standards

10.1.1. The permittee shall route all VOC and HAP emissions from the Condensate Storage Tanks (T01 to T03), the Settling Tank (T04), and the Produced Water Storage Tanks (T05 to T07) to the VRU-100 prior to release to the atmosphere. The vapor recovery system shall be designed to achieve a minimum guaranteed capture efficiency of 98% for VOC and HAP emissions. Emissions from the condensate storage tanks, the settling tank, and the produced water storage tanks will be collected and compressed by the vapor recovery unit whereby the vapors are sufficiently compressed to be introduced into the gas system right before the initial filter scrubber.
[45CSR13, R13-3513, 9.1.1.]

10.1.2. The maximum annual throughput of product to the storage tanks shall not exceed the following:

Storage Tank ID	Product Stored	Maximum Annual Throughput (gal/yr)
T01, T02, T03	Condensate	4,599,000 (combined)
T04	Settling	5,978,700
T05, T06, T07	Produced Water	1,379,700 (combined)

[45CSR13, R13-3513, 9.1.3.]

10.1.3. Maximum emissions from the tank battery (T01 through T07) shall not exceed the following limits:

Pollutant	Maximum Hourly Emissions (lbs/hr)	Maximum Annual Emissions (tpy)
VOCs	1.02	4.45

[45CSR13, R13-3513, 9.1.4.]

10.1.4. In addition to the vapor recovery units (VRU-100 and VRU-200), the permittee shall utilize three (3) of the following requirements:

a. Install additional sensing equipment to monitor the run status of the vapor recovery units (VRU-100 and VRU-200).

b. Install a by-pass system which operates automatically whereby discharge is re-routed back to the inlet of the vapor recovery units (VRU-100 and VRU-200) until the appropriate pressure is built up for the compressor to turn on.

c. Install a blanket gas and have automatic throttling valves to ensure oxygen does not enter the tanks.

d. Install a compressor that has the ability to vary the drive.

[45CSR13, R13-3513, 9.1.5.]

10.1.5. Emissions from the storage tanks (T01 through T07) that are recovered and routed to the vapor recovery units (VRU-100 and VRU-200) shall be designed and operated as specified in paragraphs a. through c. of this condition.

a. The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief valves, and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel.

b. Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

1. To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

2. To inspect or sample the material in the unit;

3. To inspect, maintain, repair, or replace equipment located inside the unit; or

4. To vent liquids, gases, or fumes from the unit through a closed-vent system designed and operated in accordance with the requirements of Condition 10.1.6. to a control device.

c. Each storage tank (T01 through T07) thief hatch shall be weighted and properly seated. The permittee must select gasket material for the hatch based on composition of the fluid in the storage vessel and weather conditions.

[45CSR13, R13-3513, 9.1.6.]

10.1.6. The facility shall comply with the closed vent system requirements for the storage tanks (T01 through T07) as noted below.

a. The permittee must design the closed vent system to route all gases, vapors, and fumes emitted from the material in the storage tanks (T01 through T07) to the vapor recovery units (VRU-100 and VRU-200).

b. The permittee must design and operate a closed vent system with no detectable emissions, as determined using olfactory, visual and auditory inspections.

c. The permittee must meet the requirements specified in paragraphs 1. and 2. of this condition if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or to a process.

1. Except as provided in paragraph c.2. of this condition, the permittee must comply with either paragraph c.1.i. or ii. of this condition for each bypass device.

i. The permittee must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that could divert the stream away from the control device or process to the atmosphere that sounds an alarm, or initiates notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being or could be diverted away from the control device or process to the atmosphere.

ii. The permittee must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

2. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph c.1. of this condition.

[45CSR13, R13-3513, 9.1.7.]

10.2. Monitoring Requirements

10.2.1. The permittee shall monitor the throughput to the storage tanks (T01 through T07) on a monthly basis. **[45CSR13, R13-3513, 9.2.1.]**

10.2.2. To demonstrate compliance with Condition 10.1.1., the permittee shall monitor the vapor recovery unit in accordance with the plans and specifications and the manufacturer's recommendations. **[45CSR13, R13-3513, 9.2.2.]**

10.2.3. To demonstrate compliance with the closed vent system requirements of Conditions 10.1.5. and 10.1.6., the permittee shall:

a. Initial requirements. Conduct an initial visual, olfactory, and auditory inspection for defects that could result in air emissions within 180 days of start-up. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices.

1. The annual inspection shall include the bypass inspection, conducted according to paragraph c. of this condition.

2. In the event that a leak or defect is detected, the permittee must repair the leak or defect as soon as practicable. Grease or another applicable substance must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.

3. Delay of repair of a closed vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emission likely to result from delay of repair. The permittee must complete repair of such equipment by the end of the next shutdown.

b. Continuous requirements. Conduct an annual visual, olfactory, and auditory inspection for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping, loose connections; liquid leaks; or broken or missing caps or other closure devices.

1. The annual inspection shall be conducted within 365 calendar days from the date of the previous inspection or earlier.

2. The annual inspection shall include the bypass inspection, conducted according to paragraph c. of this condition.

c. Bypass inspection. Visually inspect the bypass valve during the initial and annual inspection for the presence of the car seal or lock-and-key type configuration to verify that the valve is maintained in the non-diverting position to ensure that the vent stream is not diverted through the bypass device. If an alternative method is used, conduct the inspection of the bypass as described in the operating procedures.

d. Unsafe to inspect requirements. The permittee may designate any parts of the closed vent system as unsafe to inspect if the requirements in paragraphs d.1. and 2. of this condition are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs a. and b. of this condition.

1. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with the requirements.

2. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

e. Difficult to inspect requirements. The permittee may designate any parts of the closed vent system as difficult to inspect, if the requirements in paragraphs e.1. and 2. of this condition are met. Difficult to inspect parts are exempt from the inspection requirements of paragraphs a. and b. of this condition.

1. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface.

2. The permittee has a written plan that requires inspection of the equipment at least once every 5 years.

[45CSR13, R13-3513, 9.2.3.]

10.3. Testing Requirements

10.3.1. None.

10.4. Recordkeeping Requirements

10.4.1. All records required under Section 10.4. shall be kept in accordance with Condition 3.4.2. of this operating permit.
[45CSR13, R13-3513, 9.3.1.]

10.4.2. To demonstrate compliance with Conditions 10.1.2. and 10.1.3., the permittee shall maintain a record of the aggregate throughput for the storage tanks on a monthly and rolling twelve-month total.
[45CSR13, R13-3513, 9.3.4.]

10.4.3. The permittee shall maintain a copy of all design records of the process, maintenance records of equipment, and any downtime hours associated with the vapor recovery units.

a. The initial compliance requirements.

b. Each annual visual inspection conducted to demonstrate continuous compliance, including records of any repairs that were made as a result of the inspection.

c. Bypass requirements.

1. Each inspection or each time the key is checked out or a record of each time the alarm is sounded; and

2. Each occurrence that the control device was bypassed. If the device was bypassed, the records shall include the date, time, and duration of the event and shall provide the reason the event occurred. The record shall also include the estimate of emissions that were released to the environment as a result of the bypass.

d. Any part of the system that has been designated as "unsafe to inspect" in accordance with Condition 10.2.3.d. or "difficult to inspect" in accordance with Condition 10.2.3.e.

[45CSR13, R13-3513, 9.3.5.]

10.5. Reporting Requirements

10.5.1. Upon request by the Director, the permittee shall report deviations within a requested time from any occurrences when the control device was operated outside of the parameters defined in the monitoring plan. **[45CSR13, R13-3513, 9.4.1.]**

10.5.2. The permittee shall notify the Director of any downtime of the VRUs in excess of 2%, based on the 12 month rolling total, in writing to the Director of the Division of Air Quality as soon as practicable, but within ten (10) calendar days of the discovery and shall include, at a minimum, the following information: the dates and durations of each downtime event, the cause or suspected causes for each downtime event, any corrective measures taken or planned for each downtime event.
[45CSR13, R13-3513, 9.4.2.]

10.6. Compliance Plan

10.6.1. None.

11.0 Truck Loading [Emission Point: 30E]

11.1. Limitations and Standards

11.1.1. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated pollutants. Any above-ground piping, valves, pumps, etc. that show signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be replaced. **[45CSR13, R13-3513, 10.1.1.]**

11.1.2. The permittee shall route a minimum of 70%[1] of volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from the Product Loadout Rack (LDOUT1) to one of the two thermal oxidizers (TO-1, TO-2), prior to release to the atmosphere. The thermal oxidizers shall be designed to achieve a minimum control efficiency of 98%[2] for VOC and HAP emissions resulting in a minimum capture and control efficiency of 68.6%[3]. The thermal oxidizers shall be operated in accordance with Conditions 8.1.3. through 8.1.8. of this permit.

[1] *The 70% capture efficiency is an assumed value under AP-42 Section 5.2 for tanker trucks that do not pass either the MACT-level annual leak test or the NSPS-level annual leak test.*

[2] *The thermal oxidizers TO-1 and TO-2 were designed to achieve a 98% destruction efficiency when operated as described in Conditions 8.1.3. through 8.1.8. of this operating permit.*

[3] *The required 68.6% overall control efficiency for truck loading operations is based on the 70% capture efficiency and the 98% destruction efficiency. (68.6% = 70% × 98%)*

[45CSR13, R13-3513, 10.1.2.; 45CSR§30-5.1.c.]

11.1.3. The thermal oxidizers TO-1 and TO-2 are subject to the applicable requirements of 45CSR6. These requirements are included in this operating permit as Conditions 8.1.12. through 8.1.16. **[45CSR§§6-4.1. and -4.3. to -4.6.]**

11.1.4. The maximum quantity of produced water from truck loading (LDOUT1) that shall be loaded shall not exceed 1,379,700 gallons per year. Compliance with this Maximum Yearly Operation Limitation shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the throughput at any given time during the previous twelve consecutive calendar months. **[45CSR13, R13-3513, 10.1.4.]**

11.1.5. The maximum quantity of condensate from truck loading (LDOUT1) that shall be loaded shall not exceed 4,599,000 gallons per year. Compliance with this Maximum Yearly Operation Limitation shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the throughputs at any given time during the previous twelve consecutive calendar months. **[45CSR13, R13-3513, 10.1.5.]**

11.1.6. The produced water and condensate truck loading (LDOUT1) shall be operated using submerged filling into uncleaned dedicated service tanker trucks. **[45CSR13, R13-3513, 10.1.6.]**

11.2. Monitoring Requirements

11.2.1. The permittee shall monitor the liquids loaded throughput on a monthly basis.
[45CSR13, R13-3513, 10.2.1.]

11.2.2. To demonstrate compliance with Condition 11.1.2., the permittee shall monitor the thermal oxidizers (TO-1, TO-2) in accordance with the plans and specifications and manufacturer's recommendations specified in Conditions 8.1.3. through 8.1.8. The manufacturer's combustion zone temperature is specified in Condition 8.1.5.
[45CSR13, R13-3513, 10.2.2.; 45CSR§30-5.1.c.]

11.3. Testing Requirements

11.3.1. *See Conditions 8.3.1. and 8.3.8. of this permit.*

11.4. Recordkeeping Requirements

11.4.1. For the purpose of demonstrating compliance with Conditions 8.1.4. and 11.1.2., the permittee shall maintain records of the times and duration of all periods which the pilot flame was absent.
[45CSR13, R13-3513, 10.2.3.]

11.4.2. All records required under Section 11.4. 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, R13-3513, 10.3.1.]

11.4.3. To demonstrate compliance with Conditions 11.1.4. and 11.1.5., the permittee shall maintain a record of the throughput for the product loadout rack (LDOUT1) on a monthly and rolling twelve-month total.
[45CSR13, R13-3513, 10.3.4.]

11.4.4. The permittee shall maintain a copy of all design records of the process, maintenance records of equipment and any downtime hours associated with the thermal oxidizers (TO-1, TO-2).
[45CSR13, R13-3513, 10.3.5.]

11.5. Reporting Requirements

11.5.1. Upon request by the Director, the permittee shall report deviations within a requested time frame of any occurrences when the control device was operated outside of the parameters defined in the monitoring plan.
[45CSR13, R13-3513, 10.4.1.]

11.5.2. Any deviation(s) from the thermal oxidizer design and operation criteria in Conditions 3.1.10. and 11.1.2. 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, R13-3513, 10.4.2.]

11.6. Compliance Plan

11.6.1. None.

12.0 Compressor Blowdowns, Compressor Startups, Pigging Operations, and Plant Shutdowns [Emission Point: 31E]

12.1. Limitations and Standards

12.1.1. The maximum number of compressor blowdown events per year shall not exceed 936 events, with an estimated 2,159 scf per event. Compliance shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the compressor blowdown events at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-3513, 15.1.1.]

12.1.2. The maximum number of compressor startup events per year shall not exceed 936 events, with an estimated 1,050 scf per event. Compliance shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the compressor startup events at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-3513, 15.1.2.]

12.1.3. The maximum number of pigging events per year shall not exceed 182 low pressure events, with an estimated 545 scf per event and 260 high pressure events, with an estimated 2,650 scf per event. Compliance shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the low pressure and high pressure pigging events at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-3513, 15.1.3.]

12.1.4. The maximum number of vessel cleaning/maintenance events per year shall not exceed an annual total of 84,500 scf. Compliance shall be determined using a twelve-month rolling total. A twelve-month rolling total shall mean the sum of the vessel cleaning/maintenance events at any given time during the previous twelve consecutive calendar months.
[45CSR13, R13-3513, 15.1.4.]

12.2. Monitoring Requirements

12.2.1. None.

12.3. Testing Requirements

12.3.1. None.

12.4. Recordkeeping Requirements

12.4.1. All records required under Section 12.4. shall be kept in accordance with Condition 3.4.2. of this operating permit.
[45CSR13, R13-3513, 15.2.1.]

12.4.2. To demonstrate compliance with Condition 12.1.1. of this operating permit, the permittee shall maintain a record of the compressor blowdown events and estimated volume per event (scf) on a monthly and rolling twelve-month total.
[45CSR13, R13-3513, 15.2.2.]

12.4.3. To demonstrate compliance with Condition 12.1.2. of this operating permit, the permittee shall maintain a record of the compressor startup events and estimated volume per event (scf) on a monthly and rolling twelve-month total.
[45CSR13, R13-3513, 15.2.3.]

12.4.4. To demonstrate compliance with Condition 12.1.3. of this operating permit, the permittee shall maintain a record of the low pressure and high pressure pigging events and estimated volume per event (scf) on a monthly and rolling twelve-month total.
[45CSR13, R13-3513, 15.2.4.]

12.4.5. To demonstrate compliance with Condition 12.1.4. of this operating permit, the permittee shall maintain a record of the vessel cleaning/maintenance events and estimated monthly and rolling twelve-month total volume.
[45CSR13, R13-3513, 15.2.5.]

12.5. Reporting Requirements

12.5.1. None.

12.6. Compliance Plan

12.6.1. None.