COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY NATURAL MINOR OPERATING PERMIT

Issue Date: May 18, 2026 Effective Date: June 1, 2026

Expiration Date: May 18, 2031

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: 63-01011
Natural Minor
Federal Tax Id - Plant Code: 30-0528059-26

Owner Information

Name: MARKWEST LIBERTY MIDSTREAM & RESOURCES LLC
Mailing Address: 4600 JBARRY CT STE 500
CANONSBURG, PA 15317-5854

Plant Information

Plant: MARKWEST LIBERTY MIDSTREAM & RESOURCES/HARMON CREEK GAS PLT
Location: 63 Washington County 63953 Smith Township
SIC Code:

Responsible Official

Name: ROBERT W SHOUGH
Title: OPERATIONS DIRECTOR
Phone: (304) 840 - 5681 Email: rwshough@marathonpetroleum.com

Permit Contact Person

Name: NATHAN WHELDON
Title: SR. MNGR - AIR PROGRAMS
Phone: (303) 542 - 0686 Email: NMWheldon@marathonpetroleum.com

[Signature] _____
MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION

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SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
031	11.84 MMBTU/HR CRYO PLANT 1 REGEN HEATER (H-1711)	11.840	MMBTU/HR	
			N/A	Natural Gas
033	48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 1 (H-1767)	48.150	MMBTU/HR	
			N/A	Natural Gas
034	48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 2 (H-1768)	48.150	MMBTU/HR	
			N/A	Natural Gas
035	6.60 MMBTU/HR DE-ETHANIZER REGEN HEATER (H-1775)	6.600	MMBTU/HR	
			N/A	Natural Gas
036	11.99 MMBTU/HR STABILIZATION HMO HEATER (H-1769)	11.990	MMBTU/HR	
			N/A	Natural Gas
037	17.84 MMBTU/HR CRYO PLANT 2 REGEN HEATER (H-2711)	17.840	MMBTU/HR	
			N/A	Natural Gas
101	SEVEN (7) RESIDUE ELECTRIC DRIVEN RECIPROCATING COMPRESSORS		N/A	Natural Gas
102	EMERGENCY DIESEL-FIRED GENERATORS		N/A	
103	THREE (3) CO2/STABILIZER ELECTRIC DRIVEN RECIP COMPRESSORS		N/A	Natural Gas
104	FOUR (4) CENTRIFUGAL COMPRESSOR DRY SEAL VENTS		N/A	Natural Gas
202	AMINE UNIT 1		N/A	Natural Gas
301	TANKS/VESSELS		N/A	
302	TWO (2) 500-GALLON METHANOL STORAGE TANKS		N/A	
601	VENTING/BLOWDOWNS		N/A	Natural Gas
701	FUGITIVES		N/A	Natural Gas
702	TRUCK LOADOUT		N/A	Natural Gas
703	MEASUREMENT DEVICES		N/A	Natural Gas
801	PIGGING		N/A	Natural Gas
C037	FLUE GAS RECIRCULATION (FGR)		N/A	Natural Gas
C601	PLANT FLARE		N/A	Natural Gas
C701	LEAK DETECTION & REPAIR (LDAR)			
S031	CRYO REGEN HEATER 1 STACK			
S033	DE-ETHANIZER HMO HEATER 1 STACK			
S034	DE-ETHANIZER HMO HEATER 2 STACK			
S035	DE-ETHANIZER REGEN HEATER STACK			
S036	STABILIZATION HMO HEATER STACK			
S037	17.84 MMBTU/HR CRYO PLANT 2 REGEN HEATER STACK			
S102	GENERATORS STACK			
Z101	SEVEN (7) RESIDUE ELECTRIC DRIVEN RECIP COMPRESSOR STACKS			
Z103	THREE (3) CO2/STABILIZER ELECTRIC RECIP COMPRESSOR FUGITIVES			
Z104	CENTRIFUGAL DRY SEAL VENTING FUGITIVES			
Z302	500 GALLON METHANOL STORAGE TANK FUGITIVES			

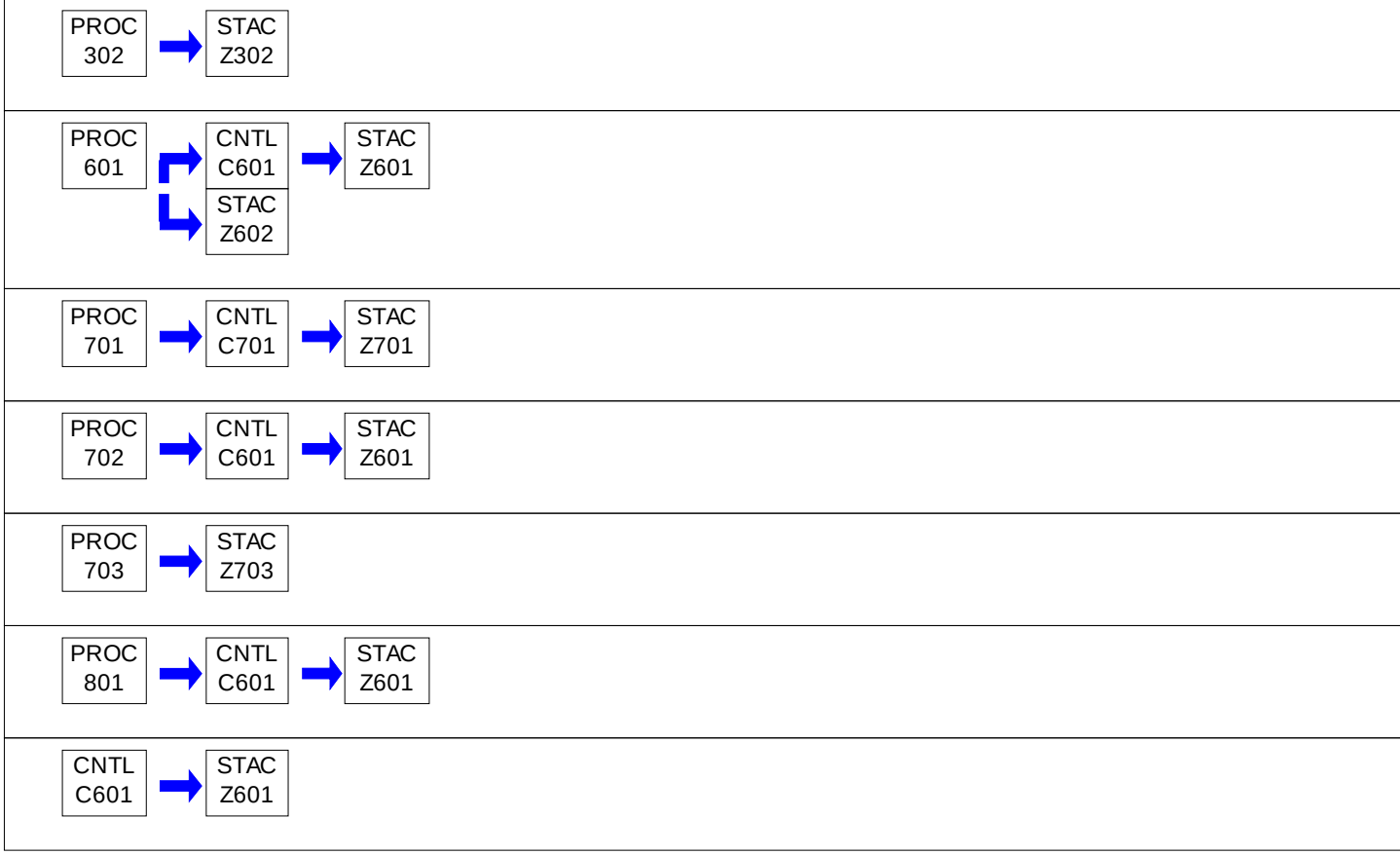
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
Z601	VENTING/BLOWDOWNS FUGITIVES		
Z602	EMERGENCY/UNCONTROLLED VENTING/BLOWDOWNS FUGITIVES		
Z701	FUGITIVE EMISSIONS		
Z703	MEASUREMENT DEVICES FUGITIVE EMISSIONS		

PERMIT MAPS

CU 031	→ STAC S031	
CU 033	→ STAC S033	
CU 034	→ STAC S034	
CU 035	→ STAC S035	
CU 036	→ STAC S036	
CU 037	→ CNTL C037	→ STAC S037
PROC 101	→ STAC Z101	
PROC 102	→ STAC S102	
PROC 103	→ STAC Z103	
PROC 104	→ STAC Z104	
PROC 202	→ CNTL C601	→ STAC Z601
PROC 301	→ CNTL C601	→ STAC Z601

PERMIT MAPS


PROC 302
STAC Z302
PROC 601
CNTL C601
STAC Z601
STAC Z602
PROC 701
CNTL C701
STAC Z701
PROC 702
CNTL C601
STAC Z601
PROC 703
STAC Z703
PROC 801
CNTL C601
STAC Z601
CNTL C601
STAC Z601

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#001 [25 Pa. Code § 121.1]

Definitions.

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]

Operating Permit Duration.

(a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.

(b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)]

Permit Renewal.

(a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.

(b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

(c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.

(e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).

(f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter F.

(a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.

(1) For a synthetic minor facility, a fee equal to:

(i) Four thousand dollars ($4,000) for calendar years 2021—2025.

(ii) Five thousand dollars ($5,000) for calendar years 2026—2030.

(iii) Six thousand three hundred dollars ($6,300) for the calendar years beginning with 2031.

(2) For a facility that is not a synthetic minor, a fee equal to:

SECTION B. General State Only Requirements

(i) Two thousand dollars ($2,000) for calendar years 2021—2025.

(ii) Two thousand five hundred dollars ($2,500) for calendar years 2026—2030.

(iii) Three thousand one hundred dollars ($3,100) for the calendar years beginning with 2031.

(b) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]

Transfer of Operating Permits.

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]

Inspection and Entry.

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#007 [25 Pa. Code §§ 127.441 & 127.444]

Compliance Requirements.

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

(1) Enforcement action

SECTION B. General State Only Requirements

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#009 [25 Pa. Code §§ 127.442(a) & 127.461]

Duty to Provide Information.

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

(1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.

(2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.

(4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450, 127.462, 127.465 & 127.703]

Operating Permit Modifications

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:

(b) Administrative Amendments. The permittee shall submit the application for administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless

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precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall submit the application for minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Significant Operating Permit Modifications. The permittee shall submit the application for significant operating permit modifications in accordance with 25 Pa. Code § 127.465.

(e) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

#012 [25 Pa. Code § 127.441]

Severability Clause.

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

(b) The Department may disapprove or condition de minimis emission increases at any time.

(c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

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(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#014 [25 Pa. Code § 127.3]

Operational Flexibility.

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

(1) Section 127.14 (relating to exemptions)

(2) Section 127.447 (relating to alternative operating scenarios)

(3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)

(4) Section 127.449 (relating to de minimis emission increases)

(5) Section 127.450 (relating to administrative operating permit amendments)

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

SECTION B. General State Only Requirements

#015 [25 Pa. Code § 127.11a]

Reactivation of Sources

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]

Circumvention.

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]

Reporting Requirements.

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

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#019 [25 Pa. Code §§ 127.441(c) & 135.5]

Sampling, Testing and Monitoring Procedures.

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

#020 [25 Pa. Code §§ 127.441(c) and 135.5]

Recordkeeping.

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

(1) The date, place (as defined in the permit) and time of sampling or measurements.

(2) The dates the analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of the analyses.

(6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

#021 [25 Pa. Code § 127.441(a)]

Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

#022 [25 Pa. Code § 127.447]

Alternative Operating Scenarios.

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

#023 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§ 4001-4015).

SECTION B. General State Only Requirements

#024 [25 Pa. Code §135.3]

Reporting

(a) If the facility is a Synthetic Minor Facility, the permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator of a Synthetic Minor Facility may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#025 [25 Pa. Code §135.4]

Report Format

If applicable, the emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

(a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

(1) Construction or demolition of buildings or structures.

(2) Grading, paving and maintenance of roads and streets.

(3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) - (8) Not applicable.

(9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(i) the emissions are of minor significance with respect to causing air pollution; and
(ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

(b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.

(c) [See Work Practice Standards.]

(d) Not applicable.

 # 002 [25 Pa. Code §123.13]

Processes

(a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

(b) Not applicable.

(c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

SECTION C. Site Level Requirements

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

(ii) - (iii) Not applicable.

(2) Not applicable.

(d) Not applicable.

 # 003 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

 # 004 [25 Pa. Code §123.21]

General

(a) This section applies to sources except those subject to other provisions of this article, with respect to the control of sulfur compound emissions.

(b) No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

 # 005 [25 Pa. Code §123.31]

Limitations

(a) Limitations are as follows:

(1) - (2) Not applicable.

(b) A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

(c) Not applicable.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall not permit the emission into the outdoor atmosphere of any visible air contaminants that equal or exceed 10% at any time.

This condition shall not apply in any of the following instances:

(1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
(2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
(3) When the emission results from sources specified in §123.1 (a)(1)—(9) (relating to prohibition of certain fugitive emissions).

SECTION C. Site Level Requirements

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with plan approval PA-63-01011A, facility-wide emissions from all air contamination sources and air cleaning devices shall not equal or exceed the following on a 12-month rolling basis:

29.0 TPY NOx;
51.0 TPY CO;
39.0 TPY VOC;
1.0 TPY SOx;
9.0 TPY PM-10;
9.0 TPY PM-2.5;
4.0 TPY Total HAPs;
109,000 TPY CO2e

 # 008 [25 Pa. Code §129.14]

Open burning operations

(a) Air basins. Not applicable.

(b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:

(1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.

(2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.

(3) The emissions interfere with the reasonable enjoyment of life or property.

(4) The emissions cause damage to vegetation or property.

(5) The emissions are or may be deleterious to human or animal health.

(c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:

(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(3) A fire set for the prevention and control of disease or pests, when approved by the Department.

(4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

(5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.

(6) A fire set solely for recreational or ceremonial purposes.

(7) A fire set solely for cooking food.

(d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:

(1) As used in this subsection the following terms shall have the following meanings:

SECTION C. Site Level Requirements

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

(2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:

(i) Air curtain destructors shall be used when burning clearing and grubbing wastes.

(ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).

(iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.

(iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.

(3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:

(i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.

(4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

II. TESTING REQUIREMENTS.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall submit a pre-test protocol to the Department for review at least 120 days prior to the performance of any EPA reference method stack test. The test report may be submitted via PSIMS*Online at https://www.depgreenport.state.pa.us/ecomm/Login.jsp. All proposed performance test methods shall be identified in the pre-test protocol.

The Department Source Testing Manual is available at this web address: http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4563.

(a) At least 120 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(b) When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter, submitted at least 120 calendar days prior to commencing an emissions testing program, referencing the previously approved procedural protocol is sufficient if the letter is approved by the Department. The letter shall be submitted as required in paragraph (a). If modifications are made to the process(es), if a different stack testing company is

SECTION C. Site Level Requirements

used, or if an applicable section of the stack test manual has been revised since the approval, a new protocol shall be submitted for approval.

(c) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Department in accordance with paragraph (h) of this condition.

(d) If the proposed testing did not occur per the required notification in paragraph (b) above, an electronic mail notification shall be sent within 15 calendar days after the expected completion date of the onsite testing to the Department, in accordance with paragraph (h) of this condition, indicating why the proposed completion date of the on-site testing was not adhered to.

(e) A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the onsite testing portion of an emission test program.

(1) The test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions.
(2) The summary results will include, at a minimum, the following information:

(A) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
(B) Permit number(s) and condition(s) which are the basis for the evaluation.
(C) Summary of results with respect to each applicable permit condition.
(D) Statement of compliance or non-compliance with each applicable permit condition.

(f) Pursuant to 25 Pa. Code § 139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(h) Pursuant to 25 Pa. Code §§ 139.53(a)(1) and 139.53(a)(3):

(1) All submittals, except test notifications & portable emission monitor tests, shall be accomplished through PSIMS*Online, available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp, if it is available.

(2) For test notifications & portable analyzer results, or if internet submittal cannot be accomplished, one electronic copy of the test submission (notifications, protocols, reports, supplemental information, etc.) shall be sent to both PSIMS Administration in Central Office and to the Regional Office AQ Program Manager at the following addresses.

CENTRAL OFFICE:
RA-EPstacktesting@pa.gov

SOUTHWEST REGIONAL OFFICE:
RA-EPSWstacktesting@pa.gov

(i) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

(j) Actions Related to Noncompliance Demonstrated by a Stack Test:

(1) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permittee shall take

SECTION C. Site Level Requirements

appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permittee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(2) If the results of the required stack test exceed any limit defined in this permit, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the permit, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the permit, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the permit may be grounds for immediate revocation of the permit to operate the affected source.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this state-only operating permit may be in excess of the limitations specified in, or established pursuant to this state-only operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

III. MONITORING REQUIREMENTS.

 # 011 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

(1) A device approved by the Department and maintained to provide accurate opacity measurements.

(2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

 # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A facility-wide inspection shall be conducted at a minimum of once per day when the facility is operating. The facility-wide inspection shall be conducted for the presence of the following:

a. Visible stack emissions;
b. Fugitive emissions; and
c. Potentially objectionable odors at the property line.

These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code §123.1 or §123.2, and potentially objectionable odors prohibited under 25 Pa. Code §123.31. Observations for visible stack emissions shall be conducted during daylight hours and all observations shall be conducted while sources are in operation. If any visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, the Owner/Operator shall take corrective action. If any visible emissions are apparent after the correction action, sources of emissions shall not start until the permittee can verify compliance with the opacity standards specified in the permit through methods prescribed in §123.43, such as EPA Method 9 readings taken by a certified visible emissions reader.

SECTION C. Site Level Requirements

 # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with plan approval PA-63-01011A, Condition #026, the Owner/Operator shall conduct a fractional gas analysis performed on the inlet gas to the facility at a minimum of once per quarter of each calendar year. Each sample shall be collected no sooner than 30 days from the previous sample.

IV. RECORDKEEPING REQUIREMENTS.

 # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

All logs and required records shall be maintained either on site, electronically, or at an alternative location acceptable to the Department for a minimum of five (5) years and shall be made available to the Department upon request.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain the following comprehensive and accurate records:

a. Hours of operation for each air contamination source and air cleaning device on a monthly and 12-month rolling basis.

b. Fuel consumption for each HMO heater and Regen Heater on a monthly and 12-month rolling basis.

c. Records including a description of testing methods, results, appropriate operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each air contamination source or air cleaning device subject to performance testing or portable analyzer testing requirements.

d. If performance testing is conducted, copies of the report that demonstrates that the subject combustion units was operated at rated capacity during performance testing.

e. Copies of the manufacturers' specifications and recommended maintenance schedule (or site-specific developed maintenance schedule) for each air contamination source and air cleaning device.

f. Records of any maintenance conducted on each air contamination source and air cleaning device.

g. Records of daily volumes routed to the flare, via the header meter, shall be maintained.

h. Records of a fractional gas analysis performed on the inlet gas to the facility at a minimum of once per quarter of each calendar year.

i. Records of the date, time, duration, volume of gas released, and emissions from each blowdown and emergency shutdown at the facility.

j. Records of each visible stack, fugitive, and potentially objectionable odor inspection shall be maintained in a log and at a minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

k. Results of any visible emissions observations to demonstrate compliance with the facility-wide 10% opacity limitation for all air contamination sources and air cleaning devices.

l. Records of any leak detected and associated repair activity through the leak detection and repair (LDAR) program or through a site-specific maintenance program.

m. Facility-wide 12-month rolling totals, calculated monthly, of the following pollutants: NOx, CO, VOC, SOx, PM-10, PM-2.5, any single HAP, total HAPs, and greenhouse gases as CO2 equivalent (CO2e).

n. Records of pigging events including, but not necessarily limited to, information on:

SECTION C. Site Level Requirements

(i) The identification, location, and date of construction of each pig launcher or receiver.
(ii) Records of each pigging operation including the identification of the pig chamber used, the date and time of the pigging operation, and the type and volume of liquids cleared.
(iii) The launcher or receiver pressure prior to venting to the atmosphere, and prior to routing emissions to a flare, where applicable.
(iv) Gas composition data representative of the composition of gas at the pig chambers.
(v) The emissions calculation for each pig chamber, using the Department's spreadsheet found at http://files.dep.state.pa.us/ or other equivalent method.

o. Records of the location, date of installation, and manufacturer's specifications for each pump.

p. Records of construction documentation, including, but not limited to, the following:

(i) Record of construction documentation that indicate new and reworked valves, piping, compressor systems, and pump systems conform to American Petroleum Institute (API), American National Standards institute (ANSI), American Society of Mechanical Engineers (ASME), or equivalent code.
(ii) Record of construction indicating that new underground drain piping shall been welded.
(iii) Record of construction showing that piping connections are welded, flanged, or screwed (if two-inch diameter or smaller).
(iv) A list of all difficult-to-monitor or unsafe-to-monitor components at the facility.
(v) A record of hydraulic testing, gas testing, or gas analyzer results on new or reworked piping connections.

q. For each tanker truck loadout operation, the owner or operator shall maintain the following records, as applicable:

(i) The identification, location, and date of construction of each vapor recovery loadout system;
(ii) Records of each tanker truck loadout operation including the date and time of the liquids loadout, the type and volume of liquids loaded, and documentation that demonstrates a minimum 98% control of VOC emissions.
(iii) Liquid loadout volumes on a 12-month rolling basis (calculated monthly).
(iv) The emissions calculation for each tanker truck loadout operation in accordance with 25 Pa. Code §135.5.

r. For each control device, the owner or operator shall maintain the following records:

(i) For non-manufacturer-tested models, the owner or operator must maintain records in accordance with 40 CFR §60.5420(c)(13) and (14) or §60.5420a(c)(13) and (14) as applicable.
(ii) For manufacturer-tested models, the owner or operator must maintain records in accordance with 40 CFR §60.5413(d)(12) and (e) or §60.5413a(d)(12) and (e) as applicable.
(iii) The summary for each complete test report, if applicable.

s. The permittee shall, upon the request of the Department, provide fuel analyses, fuel supplier certifications, or fuel samples of the fuel used in any air contamination source or air cleaning device authorized to operate under this state-only operating permit.

t. For each combustion unit, the owner or operator shall maintain the following records, including information on:

(i) The location of the combustion unit;
(ii) Either the summary for each complete test report described or the results of each periodic monitoring;
(iii) The tune-up/inspection records, which shall at a minimum include:

(a) The date the tune-up/inspection was conducted;
(b) The concentrations in the effluent stream of CO in ppmv and O2 in volume percent; and
(c) A description of any corrective actions taken as part of the tune-up; and

(iv) The emissions calculations for the combustion unit in accordance with 25 Pa. Code §135.5.

u. The applicable recordkeeping requirements of 40 CFR §60.5421a and 40 CFR §60.5421b.

SECTION C. Site Level Requirements

v. The number of hours when the CO2 compressor is down on a 12-month rolling basis.

w. Records of amine usage on a 12-month rolling basis.

x. Records of the amine circulation rate on a monthly basis.

 # 016 [25 Pa. Code §135.5]

Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with § § 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

V. REPORTING REQUIREMENTS.

 # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Unless otherwise directed by the Department, in accordance with 25 Pa. Code §135.3, the owner or operator of a facility shall submit to the Department via AES*Online or AES*XML at www.depgreenport.state.pa.us/ by March 1st of each year, a facility inventory report for the preceding calendar year for all sources regulated under this state-only operating permit. The inventory report shall include all emissions information for all sources operated during the preceding calendar year. Emissions data including, but not limited to, the following shall be reported:

(i) NOx;
(ii) CO;
(iii) SOx;
(iv) PM10;
(v) PM2.5;
(vi) VOC;
(vii) Speciated HAP including, but not limited to, benzene, ethyl benzene, formaldehyde, n-hexane, toluene, isomers and mixtures of xylenes, and 2,2,4-trimethylpentane;
(viii) Total HAP;
(ix) CO2e;
(x) CH4; and
(xi) N2O.

A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

MarkWest shall report each emergency shutdown (ESD) event that occurs at this facility in accordance with the malfunction reporting requirements of Section C of this operating permit.

 # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to

SECTION C. Site Level Requirements

unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

1. name, permit or authorization number, and location of the facility,
2. nature and cause of the malfunction, emergency or incident,
3. date and time when the malfunction, emergency or incident was first observed,
4. expected duration of excess emissions,
5. estimated rate of emissions,
6. corrective actions or preventative measures taken.
7. The 12-month rolling sum of emissions (including, but not limited to, criteria pollutants, VOCs, greenhouse gases, and total HAPs), including any emission increases that occurred as a result of the malfunction event.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

 # 020 [25 Pa. Code §135.3]

Reporting

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.

 # 021 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent

SECTION C. Site Level Requirements

particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.

(2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

(3) Paving and maintenance of roadways.

(4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

 # 022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall construct, operate, and maintain all air contamination sources and air cleaning devices authorized under this state-only operating permit in accordance with the manufacturer's specifications and recommended maintenance schedules, or site-specific specifications developed in accordance with good engineering practice and prior operating experience. Additionally, the owner/operator may not cause or permit the operation of an air contamination source in a manner inconsistent with good operating practices.

 # 023 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall minimize blowdown gas generated as a result of equipment maintenance and emergency shutdowns to the extent practical.

VII. ADDITIONAL REQUIREMENTS.

 # 024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In instances of multiple applicable emission limitations, the most stringent emission limitation applies.

 # 025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each quarterly fractional gas analysis performed on the inlet gas to the facility shall be evaluated for impacts on the actual emissions from this facility.

 # 026 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Compliance with mass emission limits established in this authorization may be demonstrated using engineering calculations based on fuel and raw material purchase records, laboratory analyses, manufacturers specifications, source test results, production and operating records, material balance methods, and/or other applicable methods, with written Department approval.

 # 027 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This state-only operating permit is based on site-specific and Federal requirements. In the event of an inconsistency or any conflicting requirements, the most stringent provision, term, condition, method or rule shall be used by default.

 # 028 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

SECTION C. Site Level Requirements

The Facility is subject to New Source Performance Standards from 40 CFR Part 60 Subparts OOOOa, OOOOb, IIII, and Dc, and National Emissions Standards for Hazardous Air Pollutants from 40 CFR Part 60 Subpart ZZZZ. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals and other communications regarding affected sources shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise directed.

Associate Director
United States Environmental Protection Agency
Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

Pennsylvania Department of Environmental Protection
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IX. COMPLIANCE SCHEDULE.

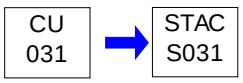
No compliance milestones exist.

SECTION D. Source Level Requirements

Source ID: 031 Source Name: 11.84 MMBTU/HR CRYO PLANT 1 REGEN HEATER (H-1711)

Source Capacity/Throughput: 11.840 MMBTU/HR
N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

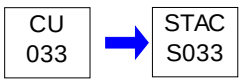
SECTION D. Source Level Requirements

Source ID: 033 Source Name: 48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 1 (H-1767)

Source Capacity/Throughput: 48.150 MMBTU/HR

N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

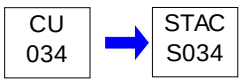
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 034 Source Name: 48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 2 (H-1768)

Source Capacity/Throughput: 48.150 MMBTU/HR
N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 035 Source Name: 6.60 MMBTU/HR DE-ETHANIZER REGEN HEATER (H-1775)

Source Capacity/Throughput: 6.600 MMBTU/HR
N/A Natural Gas

CU 035 → STAC S035

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.11]
Combustion units

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

(2) - (3) Not applicable.

(b) Not applicable.

 # 002 [25 Pa. Code §123.22]
Combustion units

(a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:

(1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period, except as provided in paragraph (4).

(2) Not applicable.

(b) - (h) Not applicable.

Fuel Restriction(s).

 # 003 [25 Pa. Code §127.441]
Operating permit terms and conditions.

The 6.60 MMBtu/hr deEthanizer regen heater (H-1775) shall only be fired on natural gas.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

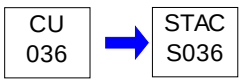
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 036 Source Name: 11.99 MMBTU/HR STABILIZATION HMO HEATER (H-1769)

Source Capacity/Throughput: 11.990 MMBTU/HR
N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 037 Source Name: 17.84 MMBTU/HR CRYO PLANT 2 REGEN HEATER (H-2711)

Source Capacity/Throughput: 17.840 MMBTU/HR
N/A Natural Gas

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.11]
Combustion units

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

(2) - (3) Not applicable.

(b) Not applicable.

 # 002 [25 Pa. Code §123.22]
Combustion units

(a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:

(1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period, except as provided in paragraph (4).

(2) Not applicable.

(b) - (h) Not applicable.

 # 003 [25 Pa. Code §127.441]
Operating permit terms and conditions.

Source 037 shall not exceed the following emission limitations:

(1) 9 ppmdv NOx at 3% O2
(2) 49 ppmdv CO at 3% O2

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall maintain the following records:

(1) Records of annual tune-ups/inspections;
(2) Fuel consumption records on a monthly basis;
(3) The concentrations of NOx and CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of Source ID 037;
(4) A description of any corrective actions taken as part of the tune-up;
(5) The date(s) the annual tune-up/inspection was conducted;
(6) The factory calibration certification sheets for the portable analyzer;
(7) The type and amount of fuel used over the 12 months prior to the tune-up;
(8) Daily fuel consumption (in units of mass and heat input), kept on both a monthly and previous 12-month basis.
(9) Records including a description of testing methods, results, regenerative heater operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for the regenerative heater.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Owner/Operator shall conduct an annual tune-up/inspection on Source 037. At a minimum, the tuneup/inspection shall consist of the following:

(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;
(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with the NOx requirement to which Source 037 is subject.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Owner/Operator shall, every three years, or within an extended timeframe approved by the Department, measure the concentrations in the effluent stream of NOx and CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable analyzer as long as it is calibrated and operated according to the manufacturer's recommendations, the procedures specified in ASTM D 6522, and the following requirements:

(1) The portable analyzer shall undergo factory laboratory calibration and cleaning every three years.
(2) The portable analyzer shall have on-site calibration checks using certified calibration gases demonstrating the analyzer accuracy requirements specified in ASTM D 6522.
(3) In order to verify emissions, the Owner/Operator shall conduct three, twenty-minute test runs recording emissions data at least once each minute.
(4) Depending on concentrations observed, fresh air purges should be performed according to manufacturer's recommendations.
(5) Re-zeroing of the portable analyzer should be performed according to manufacturer's recommendations or at least

before every test run.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 101 Source Name: SEVEN (7) RESIDUE ELECTRIC DRIVEN RECIPROCATING COMPRESSORS

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOA REQUIREMENTS

PROC 101 → STAC Z101

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §129.121]

General provisions and applicability

(a) Applicability. Beginning December 10, 2022, this section and §§ 129.122—129.130 apply to an owner or operator of one or more of the following unconventional oil and natural gas sources of VOC emissions installed at an unconventional well site, a gathering and boosting station or a natural gas processing plant in this Commonwealth which were constructed on or before December 10, 2022:

(1) - (3) Not applicable.

(4) Reciprocating compressors and centrifugal compressors.

(5) Not applicable.

(b) Not applicable.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

 # 002 [25 Pa. Code §129.126]

Compressors

(a) Applicability. This section applies to the owner or operator of a reciprocating compressor or centrifugal compressor

SECTION D. Source Level Requirements

subject to §129.121(a)(4) (relating to general provisions and applicability) that meets the following:

(1) Reciprocating compressor. Each reciprocating compressor located between the wellhead and point of custody transfer to the natural gas transmission and storage segment.

(2) Not applicable.

(b) VOC emissions control requirements for a reciprocating compressor. Beginning December 10, 2023, the owner or operator of a reciprocating compressor subject to this section shall meet one of the following:

(1) Replace the reciprocating compressor rod packing on or before one of the following:

(i) The reciprocating compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning on the later of:

(A) The date of the most recent reciprocating compressor rod packing replacement.
(B) Not applicable.

(ii) The reciprocating compressor has operated for 36 months. The number of months of operation must be continuously monitored beginning on the later of:

(A) The date of the most recent reciprocating compressor rod packing replacement.
(B) Not applicable.

(2) Route the VOC emissions to a control device or a process that meets §129.129 (relating to control devices) by using a reciprocating compressor rod packing emissions collection system that operates under negative pressure and meets the cover requirements of §129.128(a) (relating to covers and closed vent systems) and the closed vent system requirements of §129.128(b).

(c) - (d) Not applicable.

(e) Recordkeeping and reporting requirements. The owner or operator of a reciprocating compressor or centrifugal compressor subject to this section shall do the following, as applicable:

(1) For a reciprocating compressor, maintain the records under §129.130(e) (relating to recordkeeping and reporting) and submit the reports under §129.130(k)(3)(iv).

(2) Not applicable.

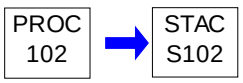
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 102 Source Name: EMERGENCY DIESEL-FIRED GENERATORS

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Not applicable.

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:

(i) Manufactured after April 1, 2006 and are not fire pump engines, or
(ii) Not applicable.

(3) Not applicable.

(b) - (e) Not applicable.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co

(a) Not applicable.

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

(c) - (d) Not applicable.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) Not applicable.

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

(c) - (j) Not applicable.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Not applicable.

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

(c) - (e) Not applicable.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.

(b) Not applicable.

SECTION D. Source Level Requirements

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR part 1068, as they apply to you.

(b) - (e) Not applicable.

(f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

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

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

(ii) - (iii) [Reserved]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

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

SECTION D. Source Level Requirements

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

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

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

(1) - (2) Not applicable.

(3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emissionrelated settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(h) Not applicable.

VII. ADDITIONAL REQUIREMENTS.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What parts of the General Provisions apply to me?

(a) Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

(b) Not applicable.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4219]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

 # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Not applicable.

SECTION D. Source Level Requirements

(2) New stationary RICE.

(i) - (ii) Not applicable.

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) Not applicable.

(b) Not applicable.

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

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

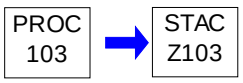
(2) - (7) Not applicable.

SECTION D. Source Level Requirements

Source ID: 103 Source Name: THREE (3) CO2/STABILIZER ELECTRIC DRIVEN RECIP COMPRESSORS

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB REQUIREMENTS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

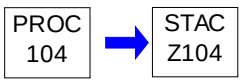
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 104 Source Name: FOUR (4) CENTRIFUGAL COMPRESSOR DRY SEAL VENTS

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB REQUIREMENTS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

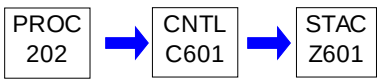
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 202 Source Name: AMINE UNIT 1

Source Capacity/Throughput: N/A Natural Gas



I. RESTRICTIONS.

Operation Hours Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The amine unit shall be routed to a closed vent system at all times except during periods when the CO2 compressor is down, not to exceed 100 hours on a 12-month rolling basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the number of hours when the CO2 compressor is down on a 12-month rolling basis.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of amine usage on a 12-month rolling basis.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the amine circulation rate on a monthly basis.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

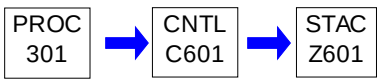
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 301 Source Name: TANKS/VESSELS

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 302 Source Name: TWO (2) 500-GALLON METHANOL STORAGE TANKS

Source Capacity/Throughput: N/A

PROC 302 → STAC Z302

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the total throughput through the methanol storage tanks on a 12-month rolling basis.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

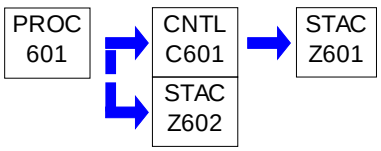
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 601 Source Name: VENTING/BLOWDOWNS

Source Capacity/Throughput: N/A Natural Gas



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 701 Source Name: FUGITIVES

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB REQUIREMENTS

PROC 701 → CNTL C701 → STAC Z701

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §129.121]

General provisions and applicability

(a) Applicability. Beginning December 10, 2022, this section and §§ 129.122—129.130 apply to an owner or operator of one or more of the following unconventional oil and natural gas sources of VOC emissions installed at an unconventional well site, a gathering and boosting station or a natural gas processing plant in this Commonwealth which were constructed on or before December 10, 2022:

(1) - (4) Not applicable.

(5) Fugitive emissions components.

(b) Not applicable.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each fugitive emissions component constructed and authorized to operate at this facility, the following applies:

(a) No later than thirty (30) days after an emission source commences operation, and at least monthly thereafter, the owner or operator of a facility shall conduct an AVO inspection.

(i) The owner/operator shall conduct daily AVO inspections on all component types.
(ii) Additionally, the owner/operator shall conduct weekly AVO inspections on pump components.

(b) For compressor component types, no later than sixty (60) days after initial startup, and at least quarterly thereafter, the owner or operator shall conduct an LDAR program using an (optical gas imaging) OGI camera. Additionally, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, shall be conducted at least annually.

(c) For pressure relief and valve components types, no later than sixty (60) days after initial startup, and at least quarterly thereafter, the owner or operator shall conduct an LDAR program using a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21.

(d) For pump component types, no later than 60 days after initial startup, and at least monthly thereafter, the owner or operator shall conduct an LDAR program using a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21.

SECTION D. Source Level Requirements

(e) For connector and flange component types, no later than sixty (60) days after initial startup, and at least semi-annually thereafter, the owner or operator shall conduct an LDAR program using Method 21.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Any fugitive emissions components that are difficult-to-monitor or unsafe-to-monitor must be identified in the monitoring plan described in 40 CFR § 60.5397a(b) through (d).

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Records of each monitoring survey conducted during the reporting period shall be included for any annual report required by an applicable New Source Performance Standard (NSPS) or National Emissions Standard for Hazardous Air Pollutants (NESHAP).

The emissions from fugitive emissions components during the reporting period shall be included in the annual AES emissions inventory reports.

 # 005 [25 Pa. Code §129.127]

Fugitive emissions components

(a) Applicability. This section applies to the owner or operator of a fugitive emissions component subject to § 129.121(a)(5) (relating to general provisions and applicability), located at one or more of the following:

(1) - (2) Not applicable.
(3) A natural gas processing plant.

(b) - (d) Not applicable.

(e) Requirements for a natural gas gathering and boosting station or a natural gas processing plant. The owner or operator of a natural gas gathering and boosting station or a natural gas processing plant shall conduct the following:

(1) An initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.

(2) An initial LDAR inspection program on or before February 8, 2023, with quarterly inspections thereafter separated by at least 60 calendar days but not more than 120 calendar days using one or more of the following:

(i) OGI equipment.
(ii) A gas leak detector that meets the requirements of EPA Method 21.
(iii) Another leak detection method approved by the Department.

(f) Requirements for extension of the LDAR inspection interval. The owner or operator of an affected facility may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate Department Regional Office.

(g) Fugitive emissions monitoring plan. The owner or operator shall develop, in writing, an emissions monitoring plan that covers the collection of fugitive emissions components at the subject facility within each company-defined area. The written plan must include the following elements:

(1) The technique used for determining fugitive emissions.
(2) A list of fugitive emissions detection equipment, including the manufacturer and model number, that may be used at the facility.
(3) A list of personnel that may conduct the monitoring surveys at the facility, including their training and experience.
(4) The procedure and timeframe for identifying and fixing a fugitive emissions component from which fugitive emissions

are detected, including for a component that is unsafe-to-repair.
(5) The procedure and timeframe for verifying fugitive emissions component repairs.
(6) The procedure and schedule for verifying the fugitive emissions detection equipment is operating properly.

(i) For OGI equipment, the verification must be completed as specified in subsection (h).
(ii) For gas leak detection equipment using EPA Method 21, the verification must be completed as specified in subsection (i).
(iii) For a Department-approved method, a copy of the request for approval that shows the method's equivalence to subsection (h) or subsection (i).

(7) A sitemap.

(8) If using OGI, a defined observation path that meets the following:

(i) Ensures that all fugitive emissions components are within sight of the path.
(ii) Accounts for interferences.

(9) If using EPA Method 21, a list of the fugitive emissions components to be monitored and an identification method to locate them in the field.

(10) A written plan for each fugitive emissions component designated as difficult-to-monitor or unsafe-to-monitor which includes the following:

(i) A method to identify a difficult-to-monitor or unsafe-to-monitor component in the field.
(ii) The reason each component was identified as difficult-to-monitor or unsafe-to-monitor.
(iii) The monitoring schedule for each component identified as difficult-to-monitor or unsafe-to-monitor. The monitoring schedule for difficult-to-monitor components must include at least one survey per year no more than 13 months apart.

(h) Verification procedures for OGI equipment. An owner or operator that identifies OGI equipment in the fugitive emissions monitoring plan in subsection (g)(6)(i) shall complete the verification by doing the following:

(1) Demonstrating that the OGI equipment is capable of imaging a gas:

(i) In the spectral range for the compound of highest concentration in the potential fugitive emissions.
(ii) That is half methane, half propane at a concentration of 10,000 ppm at a flow rate of less than or equal to 60 grams per hour (2.115 ounces per hour) from a 1/4-inch diameter orifice.

(2) Performing a verification check each day prior to use.

(3) Determining the equipment operator's maximum viewing distance from the fugitive emissions component and how the equipment operator will ensure that this distance is maintained.

(4) Determining the maximum wind speed during which monitoring can be performed and how the equipment operator will ensure monitoring occurs only at wind speeds below this threshold.

(5) Conducting the survey by using the following procedures:

(i) Ensuring an adequate thermal background is present to view potential fugitive emissions.
(ii) Dealing with adverse monitoring conditions, such as wind.
(iii) Dealing with interferences, such as steam.

(6) Following the manufacturer's recommended calibration and maintenance procedures.

(i) Verification procedures for gas leak detection equipment using EPA Method 21. An owner or operator that identifies gas leak detection equipment using EPA Method 21 in the fugitive emissions monitoring plan in subsection (g)(6)(ii) shall complete the verification by doing the following:

SECTION D. Source Level Requirements

(1) Verifying that the gas leak detection equipment meets:

(i) The requirements of Section 6.0 of EPA Method 21 with a fugitive emissions definition of 500 ppm or greater calibrated as methane using an FID-based instrument.
(ii) A site-specific fugitive emission definition that would be equivalent to subparagraph (i) for other equipment approved for use in EPA Method 21 by the Department.

(2) Using the average composition of the fluid, not the individual organic compounds in the stream, when performing the instrument response factor of Section 8.1.1 of EPA Method 21.

(3) Calculating the average stream response factor on an inert-free basis for process streams that contain nitrogen, air or other inert gases that are not organic hazardous air pollutants or VOCs.

(4) Calibrating the gas leak detection instrument in accordance with Section 10.1 of EPA Method 21 on each day of its use using zero air, defined as a calibration gas with less than 10 ppm by volume of hydrocarbon in air, and a mixture of methane in air at a concentration less than 10,000 ppm by volume as the calibration gases.

(5) Conducting the surveys which, at a minimum, must comply with the relevant sections of EPA Method 21, including Section 8.3.1.

(j) Fugitive emissions detection devices. Fugitive emissions detection devices must be operated and maintained in accordance with manufacturer-recommended procedures and as required by the test method or a Department-approved method.

(k) Background adjustment. For LDAR inspections using a gas leak detector in accordance with EPA Method 21, the owner or operator may choose to adjust the gas leak detection instrument readings to account for the background organic concentration level as determined by the procedures of Section 8.3.2 of EPA Method 21.

(l) Repair and resurvey provisions. The owner or operator shall repair a leak detected from a fugitive emissions component as follows:

(1) A first attempt at repair must be made within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:

(i) The purchase of a part is required. The repair must be completed no later than 10 calendar days after the receipt of the purchased part.
(ii) The repair is technically infeasible because of one of the following reasons:

(A) It requires vent blowdown.
(B) It requires facility shutdown.
(C) It requires a well shut-in.
(D) It is unsafe to repair during operation of the unit.

(iii) A repair that is technically infeasible under subparagraph (ii) must be completed at the earliest of the following:

(A) After a planned vent blowdown.
(B) The next facility shutdown.
(C) Within 2 years.

(2) The owner or operator shall resurvey the fugitive emissions component no later than 30 calendar days after the leak is repaired.

(3) For a repair that cannot be made during the monitoring survey when the leak is initially found, the owner or operator shall do one of the following:

(i) Take a digital photograph of the fugitive emissions component which includes:

SECTION D. Source Level Requirements

(A) The date the photo was taken.
(B) Clear identification of the component by location, such as by latitude and longitude or other descriptive landmarks visible in the picture.

(ii) Tag the component for identification purposes.

(4) A gas leak is considered repaired if:

(i) There is no visible leak image when using OGI equipment calibrated according to subsection (h).
(ii) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the fugitive emissions component for a gas leak detector calibrated according to subsection (i).
(iii) There are no detectable emissions consistent with Section 8.3.2 of EPA Method 21.
(iv) There is no bubbling at the leak interface using the soap solution bubble test specified in Section 8.3.3 of EPA Method 21.

(m) Recordkeeping and reporting requirements. The owner or operator of a fugitive emissions component subject to this section shall maintain the records under §129.130(g) and submit the reports under §129.130(k)(3)(vi).

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For fugitive emissions components, the owner or operator shall maintain the following records:

(a) The fugitive emissions monitoring plan in accordance with 40 CFR §60.5397a(b) through (d).

(b) Records of each monitoring survey which must include:

(i) The facility name and location;
(ii) The operating permit number;
(iii) The date, start time, and end time of the survey;
(iv) The name of the operator(s) performing the survey;
(v) The monitoring instrument used;
(vi) The ambient temperature, sky conditions, and maximum wind speed at the time of the survey;
(vii) Any deviations from the monitoring plan or a statement that there were none; and
(viii) Documentation of each fugitive emission including:

(A) The identification of each component from which fugitive emissions were detected;
(B) The instrument reading of each fugitive emissions component that meets the definition of a leak.
(C) The status of repair of each component including:

(1) The repair methods applied in each attempt to repair the component;
(2) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered;
(3) The reasons a component was placed on delay of repair;
(4) The date of successful repair of the component; and
(5) The information on the instrumentation or method used to resurvey the component after repair, if it was not completed during the monitoring survey in which the fugitive emissions were discovered.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall maintain the following records:

(1) Record of construction documentation that indicate new and reworked valves, piping, compressor systems, and pump

SECTION D. Source Level Requirements

systems conform to American Petroleum Institute (API), American National Standards institute (ANSI), American Society of Mechanical Engineers (ASME), or equivalent code.
(2) Record of construction indicating that new underground drain piping shall been welded.
(3) Record of construction showing that piping connections are welded, flanged, or screwed (if two-inch diameter or smaller).
(4) A list of all difficult-to-monitor or unsafe-to-monitor components at the facility.
(5) A record of hydraulic testing, gas testing, or gas analyzer results on new or reworked piping connections.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Any leak detected from a fugitive emission component shall be repaired by the owner or operator of the facility as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:

(1) The owner or operator must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or

(2) The repair or replacement is technically infeasible, would require a vent blowdown, a compressor station, processing plant or transmission station shutdown, or would be unsafe to repair during operation of the unit, in which case the repair or replacement must be completed during the next scheduled compressor station, processing plant or transmission station shutdown, after a planned vent blowdown or within two (2) years, whichever is earlier.

(3) If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within fifteen (15) days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list.

(b) Once a fugitive emission component has been repaired or replaced, the owner or operator must resurvey the component as soon as practicable, but no later than fifteen (15) calendar days after the leak is repaired.

(1) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.

(2) A leak is considered repaired if:

(A) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;
(B) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the component;
(C) There is no visible leak image when using an OGI camera calibrated at a detection sensitivity level of 60 grams/hour; or
(D) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part

SECTION D. Source Level Requirements

60, Appendix A-7, Method 21.

(c) The Department determined that the VOC and methane emissions remaining after the implementation of BAT requirements, including LDAR, are of minor significance with regard to causing air pollution, and will not, on their own, be preventing or interfering with the attainment or maintenance of an ambient air quality standard.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method or a Department-approved method.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least daily by operating personnel walk-through.

 # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period:

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or

(2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

 # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Hydraulic testing or gas testing of new and reworked piping connections, at no lower than operating pressure, shall be completed before components are returned to service. Alternatively, the components may be monitored for leaks by utilizing an approved gas analyzer within fifteen (15) days of return to services. To obtain leak-free operation, necessary adjustments shall be made.

 # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each open-ended line and open-ended valve shall be equipped with an appropriately sized blind flange, cap, plug, or a second valve to seal the line. Both valves shall be closed except during sampling procedures. This condition does not apply if when open-ended line or open-ended valve is out of service and properly follows lockout and tagout procedures.

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the owner or operator may choose to adjust the detection instrument readings to account for the background organic concentration level as determined according to the procedures in Section 8.3.2.

 # 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For annual emissions reporting purposes, cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the EPA correlation approach or by other methods acceptable to the Department.

 # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Within ten (10) days of when the most recent leaking component is added to the delay of repair list, the cumulative daily emission calculations, which include every component listed on the delay of repair list, shall be updated. If the equation below occurs, the Owner/Operator shall notify the department within fifteen (15) days of this determination. Depending on the severity or number of tagged leaks, early shutdown, or other appropriate responses may result:

(Cumulative daily emission rate of all components on the delay of repair list)*(days until the next scheduled unit shutdown) >= (total emissions from a unit shutdown)

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak checking during plant operation.

For the purposes of this operating permit, a leak is defined as:

(1) Any positive indication of any release of gaseous hydrocarbons, whether audible, visual, or odorous, determined during an AVO inspection;
(2) Any visible emissions detected by an OGI camera calibrated according to 40 CFR §60.18 and a detection sensitivity level of 60 grams/hour; or
(3) A concentration of 500 ppm calibrated as methane or greater detected by an instrument reading.

In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than ten (10) using methane. If a response factor less than ten (10) cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than ten (10) for each of the VOC to be measured.

(4) Any equipment or component that is designed to protect the equipment or safety of personnel is not considered a “leak”.

A release from any equipment or component designed by the manufacturer to protect the equipment, controller, personnel, to prevent ground water contamination, gas migration, or an emergency is also not considered a leak.

 # 019 [25 Pa. Code §127.441]

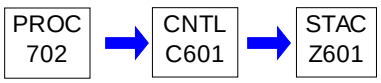
Operating permit terms and conditions.

The owner or operator may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the Southwest Regional Office.

SECTION D. Source Level Requirements

Source ID: 702 Source Name: TRUCK LOADOUT

Source Capacity/Throughput: N/A Natural Gas



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall monitor the volume of liquids loaded from Source 702 on a monthly and on a 12-month rolling basis.

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall maintain records of the volume of liquids loaded from Source 702 on a monthly and on a 12-month rolling basis.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Throughputs for the truck loadout shall not exceed 220,000 gallons of condensate during any consecutive 12-month period.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Truck loadout operations shall be dedicated normal service, filled by submerged loading.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from truck loadout operations shall be routed to the plant flare at all times during truck loadout operations. The plant flare shall be operated at all times during condensate truck loadout operations.

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 703 Source Name: MEASUREMENT DEVICES

Source Capacity/Throughput: N/A Natural Gas

PROC 703 → STAC Z703

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall maintain records of the volume of gas vented to the atmosphere through the measurement devices (spectra analyzers and gas chromatographs) on a monthly and on a 12-month rolling basis.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

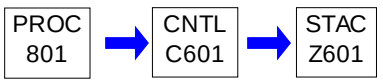
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: 801 Source Name: PIGGING

Source Capacity/Throughput: N/A Natural Gas



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall maintain records of pigging operations that include, but are not necessarily limited to, the following:

(i) The identification, location, and date of construction of each pig launcher or receiver.
(ii) Records of each pigging operation including the identification of the pig chamber used, the date and time of the pigging operation, and the type and volume of liquids cleared.
(iii) The launcher or receiver pressure prior to venting to the atmosphere, and prior to routing emissions to a flare, when applicable.
(iv) Gas composition data representative of the composition of gas at the pig chambers.
(v) The emissions calculation for each pig chamber, using the Department's spreadsheet found at http://files.dep.state.pa.us/ or other equivalent method.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator that conducts pigging operations shall employ best management practices to minimize the liquids present in the pig receiver chamber and to minimize emissions from the pig receiver chamber including, but not limited to, installing liquids ramps and using grounded steel receptacles, as applicable.

SECTION D. Source Level Requirements

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from pigging operations shall be routed to the plant flare at all times during pigging operations. The plant flare shall be operated at all times during pigging operations.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: C037 Source Name: FLUE GAS RECIRCULATION (FGR)

Source Capacity/Throughput: N/A Natural Gas

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION D. Source Level Requirements

Source ID: C601 Source Name: PLANT FLARE

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB REQUIREMENTS

CNTL C601 → STAC Z601

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions of VOC from the flare stack shall not exceed 14.0 tons during any consecutive 12-month period, updated monthly.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall monitor the daily gas throughput and heat content of the flare.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator shall operate each flare with a pilot flame present on an individual burner or stage of burners at all times when a process is routed to the flare. Each 15-minute block during which there is at least one minute where no pilot flame on an individual burner or stage of burners is present when a process is routed to the flare is a deviation of the standard. Deviations in different 15-minute blocks from the same event are considered separate deviations. The owner or operator shall monitor for the presence of a pilot flame on an individual burner or stage of burners using a device (including, but not limited to, a thermocouple, ultraviolet beam sensor, or infrared sensor) capable of detecting that the pilot flame(s) is present.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate in the flare header or headers that feed the flare as well as any flare supplemental gas used. Different flow monitoring methods may be used to measure different gaseous streams that make up the flare vent gas provided that the flow rates of all gas streams that contribute to the flare vent gas are determined. If assist air or assist steam is used, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate of assist air and/or assist steam used with the flare. If pre-mix assist air and perimeter assist are both used, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of separately measuring, calculating, and recording the volumetric flow rate of premix assist air and perimeter assist air used with the flare. Flow monitoring system requirements and acceptable alternatives are provided in paragraphs (1) through (6) of this section.

(1) The flow rate monitoring systems must be able to correct for the temperature and pressure of the system and output

parameters in standard conditions (i.e., a temperature of 20°C (68°F) and a pressure of 1 atmosphere).

(2) Mass flow monitors may be used for determining volumetric flow rate of flare vent gas provided the molecular weight of the flare vent gas is determined using compositional analysis so that the mass flow rate can be converted to volumetric flow at standard conditions using the following equation.

Qvol = [(Qmass)(385.3)]/MWt

Where:
Qvol = Volumetric flow rate, standard cubic feet per second.
Qmass = Mass flow rate, pounds per second.
385.3 = Conversion factor, standard cubic feet per pound-mole.
MWt = Molecular weight of the gas at the flow monitoring location, pounds per pound-mole.

(3) Mass flow monitors may be used for determining volumetric flow rate of assist air or assist steam. Use equation in paragraph (2) of this section to convert mass flow rates to volumetric flow rates. Use a molecular weight of 18 pounds per pound-mole for assist steam and use a molecular weight of 29 pounds per pound-mole for assist air.

(4) Continuous pressure/temperature monitoring system(s) and appropriate engineering calculations may be used in lieu of a continuous volumetric flow monitoring systems provided the molecular weight of the gas is known. For assist steam, use a molecular weight of 18 pounds per pound-mole. For assist air, use a molecular weight of 29 pounds per pound-mole. For flare vent gas, molecular weight must be determined using compositional analysis as specified in paragraph (b) of this section.

(5) Continuously monitoring fan speed or power and using fan curves is an acceptable method for continuously monitoring assist air flow rates.

(6) For perimeter assist air intentionally entrained in lower and/or upper steam, the monitored steam flow rate and the maximum design air-to-steam volumetric flow ratio of the entrainment system may be used to determine the assist air flow rate.

(b) The owner or operator shall determine the concentration of individual components in the flare vent gas using either the methods provided in paragraph (b)(1) or (2) of this section. Alternatively, the owner or operator may elect to directly monitor the net heating value of the flare vent gas following the methods provided in paragraphs (b)(3) of this section and, if desired, may directly measure the hydrogen concentration in the flare vent gas following the methods provided in paragraphs (b)(4) of this section. The owner or operator may elect to use different monitoring methods for different gaseous streams that make up the flare vent gas using different methods provided the composition or net heating value of all gas streams that contribute to the flare vent gas are determined.

(1) Except as provided in paragraphs (b)(5) and (6) of this section, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15-minutes), calculating, and recording the individual component concentrations present in the flare vent gas.

(2) Except as provided in paragraphs (b)(5) and (6) of this section, the owner or operator shall install, operate, and maintain a grab sampling system capable of collecting an evacuated canister sample for subsequent compositional analysis at least once every eight hours while there is flow of a process to the flare. Subsequent compositional analysis of the samples must be performed according to Method 18 of 40 CFR part 60, appendix A-6, ASTM D6420-99 (Reapproved 2010), ASTM D1945-03 (Reapproved 2010), ASTM D1945-14 or ASTM UOP539-12 (all incorporated by reference—see § 63.14).

(3) Except as provided in paragraphs (b)(5) and (6) of this section, the owner or operator shall install, operate, calibrate, and maintain a calorimeter capable of continuously measuring, calculating, and recording NHVvg at standard conditions.

(4) If the owner or operator uses a continuous net heating value monitor according to paragraph (b)(3) of this section, the owner or operator may, at their discretion, install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the hydrogen concentration in the flare vent gas.

SECTION D. Source Level Requirements

(5) Direct compositional or net heating value monitoring is not required for purchased ("pipeline quality") natural gas streams. The net heating value of purchased natural gas streams may be determined using annual or more frequent grab sampling at any one representative location. Alternatively, the net heating value of any purchased natural gas stream can be assumed to be 920 Btu/scf.

(6) Direct compositional or net heating value monitoring is not required for gas streams that have been demonstrated to have consistent composition (or a fixed minimum net heating value).

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator shall conduct visible emissions observations using either the methods in paragraph (1) of this section or, alternatively, the methods in paragraph (2) of this section. The owner or operator must record and report any instances where visible emissions are observed for more than 5 minutes during any 2 consecutive hours as specified in §60.18(c)(1).

(1) At least once per day for each day a process is routed to the flare, conduct visible emissions observations using an observation period of 5 minutes using Method 22 at 40 CFR part 60, appendix A-7. If at any time the owner or operator sees visible emissions while a process is routed to the flare, even if the minimum required daily visible emission monitoring has already been performed, the owner or operator shall immediately begin an observation period of 5 minutes using Method 22 at 40 CFR part 60, appendix A-7. If visible emissions are observed for more than one continuous minute during any 5-minute observation period, the observation period using Method 22 at 40 CFR part 60, appendix A-7 must be extended to 2 hours or until 5-minutes of visible emissions are observed. Daily 5-minute Method 22 observations are not required to be conducted for days the flare does not receive any volumetric flow from any process.

(2) Use a video surveillance camera to continuously record (at least one frame every 15 seconds with time and date stamps) images of the flare flame and a reasonable distance above the flare flame at an angle suitable for visual emissions observations. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the camera images may be viewed at any time.

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain the following comprehensive and accurate records for the open air-assisted plant flare on a monthly and on a 12-month rolling basis:

a.) Daily gas throughput;
b.) Heat content; and
c.) Emissions of criteria pollutants, VOCs, HAPs, and greenhouse gases.

V. REPORTING REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator must record and report any instances where visible emissions are observed for more than 5 minutes during any 2 consecutive hours as specified in §60.18(c)(1).

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall operate the flare in accordance with manufacturer specifications and the manufacturer's recommended operating parameters to minimize emission of air pollutants.

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

(a) Introduction.

(1) This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.

(2) Not applicable.

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f).

(4) Not applicable.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)(1) Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation [See 40 CFR 60.18 for formatting]:

HT = K n¿i=1 CiHi

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

K = Constant, 1.740(10^-7) (1/ppm)(g mole/scm)(MJ/kcal)
Where the standard temperature for (g mole/scm) is 20°C;

SECTION D. Source Level Requirements

Ci = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

Hi = Net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, Vmax, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

Log10 (Vmax) = (HT + 28.8)/31.7

Vmax = Maximum permitted velocity, M/sec
28.8 = Constant
31.7 = Constant
HT = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation.

Vmax = 8.706 + 0.7084 (HT)

where:
Vmax = Maximum permitted velocity, m/sec
8.706 = Constant
0.7084 = Constant
HT = The net heating value as determined in paragraph (f)(3).

SECTION E. Source Group Restrictions.

Group Name: HEATERS

Group Description: Combustion Units > 10 MMBtu/hr First Authorized under 2018 GP-5

Sources included in this group

ID	Name
031	11.84 MMBTU/HR CRYO PLANT 1 REGEN HEATER (H-1711)
033	48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 1 (H-1767)
034	48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 2 (H-1768)
036	11.99 MMBTU/HR STABILIZATION HMO HEATER (H-1769)

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.11]

Combustion units

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

(2) - (3) Not applicable.

(b) Not applicable.

 # 002 [25 Pa. Code §123.22]

Combustion units

(a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:

(1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period, except as provided in paragraph (4).

(2) - (4) Not applicable.

(b) - (h) Not applicable.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall not permit the emission into the outdoor atmosphere of visible air contaminants from a combustion unit in such a manner that the opacity of the emission is equal to or greater than 10% at any time.

The permittee shall ensure the combustion unit meets the visible emissions standards as determined by the methods described in 25 Pa. Code §123.43.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Sources 031, 033, 034, and 036 are subject to the following emission limitations:

- 30 ppmvd NOx at 3% O2.
- 130 ppmvd CO at 3% O2.
- 0.4 lbs PM/MMBtu.

SECTION E. Source Group Restrictions.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each small combustion unit (< 100 MMBtu/hr) constructed and authorized to operate under this state-only operating permit, the owner or operator shall, within 180 days after authorization of this state-only operating permit, conduct either a performance test or periodic monitoring.

At a minimum frequency of once every five (5) calendar years from the date of the previous performance test or periodic monitoring, the owner or operator shall measure the concentrations in the effluent stream of NOx and CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable analyzer as long as it is calibrated and operated according to the manufacturer's recommendations, the procedures specified in ASTM D-6522, and the following requirements:

(i) The portable analyzer shall undergo factory laboratory calibration and cleaning every three years.
(ii) The portable analyzer shall have on-site calibration checks using certified calibration gases demonstrating the analyzer accuracy requirements specified in ASTM D-6522.
(iii) In order to verify emissions, the owner or operator shall conduct three, 20-minute test runs recording emissions data at least once each minute.
(iv) Depending on concentrations observed, fresh air purges should be performed according to manufacturer's recommendations.
(v) Re-zeroing of the portable analyzer should be performed according to manufacturer's recommendations or at least before every test run.

A performance test may be used in lieu of periodic monitoring.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) When conducting periodic monitoring on a combustion unit, the owner or operator may follow the procedures below. If the owner or operator decides to deviate from those procedures, they must submit a request to use an alternate procedure, in writing, at least 60 days prior to performing the periodic monitoring. In the alternate procedure request, the owner or operator must demonstrate the alternate procedure's equivalence to the standard procedure to the satisfaction of the Division of Source Testing and Monitoring.

(b) Standardized Periodic Monitoring Procedure.

(i) Conduct three test runs of at least 20-minutes duration within 10% of 100% peak (or the highest achievable) load.

(ii) Determine NOx and CO emissions and O2 concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522 or by following the procedures in this section.

(iii) If the measured NOx or CO emissions concentrations are in exceedance of the emissions limit, the owner or operator must perform a stack test within 180 days of the periodic monitoring.

(iv) Periodic monitoring for each combustion unit shall be conducted within 180 days of authorization of this state-only operating permit and at a minimum frequency of once every five (5) calendar years thereafter. A performance test may be used in lieu of periodic monitoring.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Standard for sulfur dioxide.

SECTION E. Source Group Restrictions.

(a) - (g) Not applicable.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) - (3) Not applicable.

(4) Other fuels-fired affected facilities with heat input capacities betweeen 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) - (j) Not applicable.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.46c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Emission monitoring for sulfur dioxide

(a) - (d) Not applicable.

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO2 standards based on fuel supplier certification, as described under §60.48c(f), as applicable.

(f) Not applicable.

IV. RECORDKEEPING REQUIREMENTS.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each combustion unit, the owner or operator shall maintain the following records, including information on:

(a) The tune-up/inspection records, which shall at a minimum include:

(i) The concentrations of NOx and CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the small combustion unit;
(ii) A description of any corrective actions taken as part of the tune-up;
(iii) The date(s) the annual tune-up/inspection was conducted;
(iv) The factory calibration certification sheets for the portable analyzer; and
(v) The type and amount of fuel used over the 12 months prior to the tune-up; and

(b) The emissions calculations for the combustion unit in accordance with 25 Pa. Code §135.5.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part.

(b) - (e) Not applicable.

(f) Fuel supplier certification shall include the following information:

(1) - (3) Not applicable.

(4) For other fuels:

(i) The name of the supplier of the fuel;
(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

SECTION E. Source Group Restrictions.

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)

(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) Not applicable.

(h) - (j) Not applicable.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For each small combustion unit (< 100 MMBtu/hr) constructed and authorized to operate under this state-only operating permit, the owner or operator shall conduct a tune-up/inspection on the small combustion unit within 180 days of authorization of this state-only operating permit and within five (5) calendar years from the date of the previous tune-up/inspection. At a minimum, the tune-up/inspection shall consist of the following:

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;
(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with the NOx requirement to which the small combustion unit is subject.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

SECTION E. Source Group Restrictions.

Group Name: SUBPART OOOOA REQUIREMENTS

Group Description: Subpart OOOOa Requirements

Sources included in this group

ID	Name
101	SEVEN (7) RESIDUE ELECTRIC DRIVEN RECIPROCATING COMPRESSORS

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

Am I subject to this subpart?

You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (j) of this section, that is located within the Crude Oil and Natural Gas source category, as defined in § 60.5430a, for which you commence construction, modification, or reconstruction after September 18, 2015, and on or before December 6, 2022. Facilities located inside and including the Local Distribution Company (LDC) custody transfer station are not subject to this subpart. An affected facility must continue to comply with the requirements of this subpart until it begins complying with a more stringent requirement, that applies to the same affected facility, in an approved, and effective, state or Federal plan that implements subpart OOOOc of this part, or modifies or reconstructs after December 6, 2022, and thus becomes subject to subpart OOOOb of this part.

(a) - (b) Not applicable.

(c) Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

(d) - (j) Not applicable.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

How do I demonstrate continuous compliance with the standards for my well, centrifugal compressor, reciprocating cor

(a) - (b) Not applicable.

(c) For each reciprocating compressor affected facility complying with § 60.5385a(a)(1) or (2), you must demonstrate continuous compliance according to paragraphs (c)(1) through (3) of this section. For each reciprocating compressor affected facility complying with § 60.5385a(a)(3), you must demonstrate continuous compliance according to paragraph (c)(4) of this section.

(1) You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup, since August 2, 2016, or since the date of the most recent reciprocating compressor rod packing replacement, whichever is latest.

(2) You must submit the annual reports as required in § 60.5420a(b)(1) and (4) and maintain records as required in § 60.5420a(c)(3).

(3) You 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.

(4) You must operate the rod packing emissions collection system under negative pressure and continuously comply with the cover and closed vent requirements in § 60.5416a(a) and (b).

(d) - (e) Not applicable.

SECTION E. Source Group Restrictions.

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

(g) - (h) Not applicable.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are my notification, reporting, and recordkeeping requirements?

(a) Not applicable.

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (8) and (12) of this section and performance test reports as specified in paragraph (b)(9) or (10) of this section, if applicable. You must submit annual reports following the procedure specified in paragraph (b)(11) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (8) and (12) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting
period.

(1) The general information specified in paragraphs (b)(1)(i) through (iv) of this section is required for all reports.

(i) The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.
(ii) An identification of each affected facility being included in the annual report.
(iii) Beginning and ending dates of the reporting period.
(iv) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(2) - (3) Not applicable.

(4) For each reciprocating compressor affected facility, the information specified in paragraphs (b)(4)(i) through (iii) of this section.

SECTION E. Source Group Restrictions.

(i) The cumulative number of hours of operation or the number of months since initial startup, since August 2, 2016, or since the previous reciprocating compressor rod packing replacement, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

(ii) If applicable, for each deviation that occurred during the reporting period and recorded as specified in paragraph (c)(3)(iii) of this section, the date and time the deviation began, duration of the deviation and a description of the deviation.

(iii) If required to comply with § 60.5385a(a)(3), the information in paragraphs (b)(4)(iii)(A) through (C) of this section.

(A) Dates of each inspection required under § 60.5416a(a) and (b);
(B) Each defect or leak identified during each inspection, and date of repair or date of anticipated repair if repair is delayed; and
(C) Date and time of each bypass alarm or each instance the key is checked out if you are subject to the bypass requirements of § 60.5416a(a)(4).

(5) - (14) Not applicable.

(c) Recordkeeping requirements. You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (18) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

(1) - (2) Not applicable.

(3) For each reciprocating compressor affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.

(i) Records of the cumulative number of hours of operation or number of months since initial startup, since August 2, 2016, or since the previous replacement of the reciprocating compressor rod packing, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

(ii) Records of the date and time of each reciprocating compressor rod packing replacement, or date of installation of a rod packing emissions collection system and closed vent system as specified in § 60.5385a(a)(3).

(iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in § 60.5385a, including the date and time the deviation began, duration of the deviation, and a description of the deviation.

(4) - (18) Not applicable.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What are my additional reporting requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?

(a) You must comply with the requirements of paragraphs (b) and (c) of this section in addition to the requirements of § 60.487a(a), (b), (c)(2)(i) through (iv), and (c)(2)(vii) through (viii). You must submit semiannual reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in § 60.4. Once the form has been available in CEDRI for at least 90 days, you must begin submitting all subsequent reports via CEDRI. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

SECTION E. Source Group Restrictions.

(b) Not applicable.

(c) An owner or operator must include the information specified in paragraphs (c)(1) and (2) of this section in all semiannual reports in addition to the information required in § 60.487a(c)(2)(i) through (vi):

(1) Number of pressure relief devices for which leaks were detected as required in § 60.5401a(b)(2); and

(2) Number of pressure relief devices for which leaks were not repaired as required in § 60.5401a(b)(3).

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

When must I comply with this subpart?

(a) You must be in compliance with the standards of this subpart no later than August 2, 2016 or upon startup, whichever is later.

(b) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart.

(c) Not applicable.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What GHG and VOC standards apply to reciprocating compressor affected facilities?

You 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 section for each reciprocating compressor affected facility.

(a) You must replace the reciprocating compressor rod packing according to either paragraph (a)(1) or (2) of this section, or you must comply with paragraph (a)(3) of this section.

(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 your 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 § 60.5411a(a) and (d).

(b) You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5410a(c).

(c) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5415a(c).

(d) You must perform the reporting as required by § 60.5420a(b)(1) and (4) and the recordkeeping as required by §

SECTION E. Source Group Restrictions.

60.5420a(c)(3), (6) through (9), and (17), as applicable.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §60.1 through §60.19 apply to you.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a]

Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, in subpart A or subpart VVa of part 60; and the terms shall have the specific meanings given them under 40 CFR 60.5430a.

SECTION E. Source Group Restrictions.

Group Name: SUBPART OOOOB REQUIREMENTS

Group Description: Subpart OOOOb Requirements

Sources included in this group

ID	Name
103	THREE (3) CO2/STABILIZER ELECTRIC DRIVEN RECIP COMPRESSORS
104	FOUR (4) CENTRIFUGAL COMPRESSOR DRY SEAL VENTS
701	FUGITIVES
C601	PLANT FLARE

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

Am I subject to this subpart?

You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (i) of this section, that is located within the Crude Oil and Natural Gas source category, as defined in § 60.5430b, for which you commence construction, modification, or reconstruction after December 6, 2022. Facilities located inside and including the Local Distribution Company (LDC) custody transfer station are not subject to this subpart.

(a) Not applicable.

(b) Each centrifugal compressor affected facility, which is a single centrifugal compressor. A centrifugal compressor located at a well site is not an affected facility under this subpart. A centrifugal compressor located at a centralized production facility is an affected facility under this subpart.

(c) Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site is not an affected facility under this subpart. A reciprocating compressor located at a centralized production facility is an affected facility under this subpart.

(d) - (e) Not applicable.

(f) Each process unit equipment affected facility, which is the group of all equipment within a process unit at an onshore natural gas processing plant is an affected facility.

(1) - (2) Not applicable.

(g) - (i) Not applicable.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5380b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What GHG and VOC standards apply to centrifugal compressor affected facilities?

The Owner/Operator shall comply with the GHG and VOC standards applicable to centrifugal compressor affected facilities in 40 CFR 60.5380b.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What GHG and VOC standards apply to reciprocating compressor affected facilities?

The Owner/Operator shall comply with the GHG and VOC standards applicable to reciprocating compressor affected facilities in 40 CFR 60.5385b.

SECTION E. Source Group Restrictions.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

How do I demonstrate continuous compliance with the standards for each of my affected facilities?

The Owner/Operator shall demonstrate continuous compliance with the standards applicable to each affected facility in accordance with 40 CFR 60.5415b.

II. TESTING REQUIREMENTS.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5386b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What test methods and procedures must I use for my centrifugal compressor and reciprocating compressor affected facilities?

The Owner/Operator shall comply with the test methods applicable to centrifugal and reciprocating compressor affected facilities in 40 CFR 60.5386b.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5403b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What test methods and procedures must I use for my process unit equipment affected facilities?

The Owner/Operator shall comply with the test methods and procedures for process unit equipment affected facilities in accordance with 40 CFR 60.5403b.

III. MONITORING REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5400b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What GHG and VOC standards apply to process unit equipment affected facilities?

The Owner/Operator shall comply with the applicable requirements for each process unit equipment affected facility in accordance with 40 CFR 60.5400b.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5401b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are the alternative GHG and VOC standards for process unit equipment affected facilities?

The Owner/Operator may comply with the alternative GHG and VOC standards for process unit equipment affected facilities in accordance with 40 CFR 60.5401b.

IV. RECORDKEEPING REQUIREMENTS.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are my notification, reporting, and recordkeeping requirements?

The Owner/Operator shall comply with all applicable notification, reporting, and recordkeeping requirements of 40 CFR 60.5420b.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5421b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are my additional recordkeeping requirements for process unit equipment affected facilities?

SECTION E. Source Group Restrictions.

The Owner/Operator shall comply with the additional recordkeeping requirements for process unit equipment affected facilities in accordance with 40 CFR 60.5421b.

V. REPORTING REQUIREMENTS.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are my notification, reporting, and recordkeeping requirements?

(a) Notifications. You must submit notifications according to paragraphs (a)(1) and (2) of this section if you own or operate one or more of the affected facilities specified in § 60.5365b that was constructed, modified, or reconstructed during the reporting period. You must submit the notification in paragraph (a)(3) of this section if you use an alternative standard for fugitive emissions components in accordance with § 60.5399b. You must submit the notification in paragraph (a)(4) of this section if you undertake well closure activities as specified in § 60.5397b(l).

(1) If you own or operate a process unit equipment affected facility located at an onshore natural gas processing plant, or a sweetening unit, you must submit the notifications required in §§ 60.7(a)(1), (3), and (4) and 60.15(d). If you own or operate a well, centrifugal compressor, reciprocating compressor, process controller, pump, storage vessel, collection of fugitive emissions components at a well site, or collection of fugitive emissions components at a compressor station affected facility, you are not required to submit the notifications required in §§ 60.7(a)(1), (3), and (4) and 60.15(d).

(2) – (5) Not applicable.

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (14) of this section following the procedure specified in paragraph (b)(15) of this section. You must submit performance test reports as specified in paragraph (b)(12) or (13) of this section, if applicable. Subject to the exception in the next sentence, the initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to § 60.5410b; subsequent annual reports are due no later than the same date each year as the initial annual report. Notwithstanding the preceding sentence, no annual report is due before November 30, 2026, on or before which date you must submit all annual reports that were due before November 30, 2026 per the timing specified in the preceding sentence; then subsequent annual reports thereafter are due no later than 90 days after the end of each annual compliance period. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (14) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period. You must submit the information in paragraph (b)(1)(v) of this section, as applicable, for your well affected facility which undergoes a change of ownership during the reporting period, regardless of whether reporting under paragraphs (b)(2) through (4) of this section is required for the well affected facility.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are my notification, reporting, and recordkeeping requirements?

The Owner/Operator shall comply with the applicable requirements of 40 CFR §60.5420b(d) - (f) regarding electronic reporting, claims of EPA system outage, and claims of force majeure.

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are my additional reporting requirements for process unit equipment affected facilities?

The Owner/Operator shall comply with the additional reporting requirements for process unit equipment affected facilities in accordance with 40 CFR 60.5422b.

SECTION E. Source Group Restrictions.

VI. WORK PRACTICE REQUIREMENTS.

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

When must I comply with this subpart?

The Owner/Operator shall comply with the applicable requirements of 40 CFR 60.5370b.

VII. ADDITIONAL REQUIREMENTS.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

As specified in 40 CFR §60.5365b, the owner or operator must comply with the requirements applicable to each affected facility under 40 CFR Part 60 Subpart OOOOb--Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022.

 # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5371b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What GHG and VOC standards apply to super-emitter events?

The Owner/Operator shall comply with the applicable requirements of 40 CFR §60.5371b relating to super-emitter events.

 # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5402b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What are the exceptions to the GHG and VOC standards for process unit equipment affected facilities?

The Owner/Operator may comply with the exceptions to the GHG and VOC standards for process unit equipment affected facilities in accordance with 40 CFR 60.5402b.

 # 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What parts of the General Provisions apply to me?

Table 5 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

 # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430b]

Subpart OOOOb - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022

What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of this part; and the following terms shall have the specific meanings given them.

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

SECTION G. Emission Restriction Summary.

Source Id	Source Description
031	11.84 MMBTU/HR CRYO PLANT 1 REGEN HEATER (H-1711)

Emission Limit			Pollutant
130.000	PPMV	at 3% O2 (GP-5)	CO
30.000	PPMV	at 3% O2 (GP-5)	NOX
0.400	Lbs/MMBTU	(GP-5)	Particulate

033 48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 1 (H-1767)

Emission Limit			Pollutant
130.000	PPMV	at 3% O2 (GP-5)	CO
30.000	PPMV	at 3% O2 (GP-5)	NOX
0.400	Lbs/MMBTU	(GP-5)	Particulate

034 48.15 MMBTU/HR DE-ETHANIZER HMO HEATER 2 (H-1768)

Emission Limit			Pollutant
130.000	PPMV	at 3% O2 (GP-5)	CO
30.000	PPMV	at 3% O2 (GP-5)	NOX
0.400	Lbs/MMBTU	(GP-5)	Particulate

036 11.99 MMBTU/HR STABILIZATION HMO HEATER (H-1769)

Emission Limit			Pollutant
130.000	PPMV	at 3% O2 (GP-5)	CO
30.000	PPMV	at 3% O2 (GP-5)	NOX
0.400	Lbs/MMBTU	(GP-5)	Particulate

037 17.84 MMBTU/HR CRYO PLANT 2 REGEN HEATER (H-2711)

Emission Limit			Pollutant
49.000	PPMV	at 3% O2	CO
9.000	PPMV	at 3% O2	NOX

Site Emission Restriction Summary

Emission Limit			Pollutant
51.000	Tons/Yr	PA-63-01011A	CO
29.000	Tons/Yr	PA-63-01011A	NOX
39.000	Tons/Yr	PA-63-01011A	VOC
1.000	Tons/Yr	PA-63-01011A	SOX
9.000	Tons/Yr	PA-63-01011A	PM10
9.000	Tons/Yr	PA-63-01011A	PM2.5
4.000	Tons/Yr	PA-63-01011A	Hazardous Air Pollutants
109,000.000	Tons/Yr	PA-63-01011A	Carbon Dioxide

SECTION G. Emission Restriction Summary.

SECTION H. Miscellaneous.

This natural minor state-only operating permit incorporates the applicable requirements of plan approval PA-63-01011A.

MarkWest Liberty Midstream & Resources, L.L.C. is granted authorization to continue operating the following air contamination sources:

• Source 031, one (1) 11.84 MMBtu/hr Cryo Plant 1 Regen Heater (H-1711);
• Source 033, one (1) 48.15 MMBtu/hr deEthanizer HMO Heater 1 (H-1767);
• Source 034, one (1) 48.15 MMBtu/hr deEthanizer HMO Heater 2 (H-1768);
• Source 035, one (1) 6.60 MMBtu/hr deEthanizer regen heater (H-1775);
• Source 036, one (1) 11.99 MMBtu/hr stabilization HMO heater (H-1769);
• Source 037, one (1) 17.84 MMBtu/hr Cryo Plant 2 regen heater (H-2711) equipped with flue gas recirculation (FGR);
• Source 101, seven (7) 5,000-HP electric-driven residue compressors with rod packing emissions;
• Source 102, two (2) diesel-fired emergency generator engines (49-HP and 279-HP);
• Source 103, three (3) 5,000-HP electric driven compressors comprising of two (2) stabilization compressors and one (1) CO2 compressor with rod packing emissions
• Source 104, centrifugal compressor dry seal vents comprising of two (2) uncontrolled residue centrifugal compressors and two (2) regen centrifugal compressors controlled by a 126.52 MMBtu/hr plant flare;
• Source 202, an amine unit;
• Source 301, Tanks/Vessels, comprising of one (1) 4,200-gallon closed drain tank and one (1) 1,430-gallon amine tank with emissions controlled by a 126.52 MMBtu/hr plant flare;
• Source 302, two (2) 500-gallon methanol storage tanks;
• Source 601, Venting/Blowdowns (partially controlled by the 126.52 MMBtu/hr plant flare);
• Source 701, Fugitives, with emission reductions achieved through an LDAR program;
• Source 702, Truck Loadout, with emissions controlled by the 126.52 MMBtu/hr plant flare;
• Source 703, Twenty-Nine (29) Measurement Devices;
• Source 801, Pigging Operations, controlled by the 126.52 MMBtu/hr plant flare; and
• Miscellaneous sources including air-actuated pneumatic devices (previously designated as Source 501).

Plan approval PA-63-01011B, authorized on May 2, 2025, is currently undergoing construction and will be incorporated into this state-only operating permit at the appropriate time if authorized by the Department.

****** End of Report ******