



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM**

**STATE ONLY NATURAL MINOR OPERATING PERMIT**

Issue Date: December 4, 2024

Effective Date: December 4, 2024

Expiration Date: November 30, 2029

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: 10-00359**

Natural Minor

Federal Tax Id - Plant Code: 45-5100747-1

**Owner Information**

Name: MARKWEST LIBERTY BLUESTONE LLC

Mailing Address: 4600 JBARRY CT  
SUITE 500  
CANONSBURG, PA 15317-5854

**Plant Information**

Plant: MARKWEST LIBERTY BLUESTONE LLC/SARSEN GAS PROC PLT

Location: 10 Butler County 10928 Forward Township  
SIC Code: 1321 Mining - Natural Gas Liquids

**Responsible Official**

Name: ROBERT W. SHOUGH

Title: OPERATIONS DIRECTOR

Phone: (724) 998 - 6644

Email: rwshough@marathonpetroleum.com

**Permit Contact Person**

Name: ALLIE JUAREZ

Title: ENVIRONMENTAL ENGINEER

Phone: (412) 815 - 8886

Email: ajuarez@marathonpetroleum.com

[Signature] \_\_\_\_\_

LORI L. MCNABB, NORTHWEST REGION AIR PROGRAM MANAGER



## SECTION A. Table of Contents

### Section A. Facility/Source Identification

Table of Contents  
Site Inventory List

### Section B. General State Only Requirements

- #001 Definitions.
- #002 Operating Permit Duration.
- #003 Permit Renewal.
- #004 Operating Permit Fees under Subchapter I.
- #005 Transfer of Operating Permits.
- #006 Inspection and Entry.
- #007 Compliance Requirements.
- #008 Need to Halt or Reduce Activity Not a Defense.
- #009 Duty to Provide Information.
- #010 Revising an Operating Permit for Cause.
- #011 Operating Permit Modifications
- #012 Severability Clause.
- #013 De Minimis Emission Increases.
- #014 Operational Flexibility.
- #015 Reactivation of Sources
- #016 Health Risk-based Emission Standards and Operating Practice Requirements.
- #017 Circumvention.
- #018 Reporting Requirements.
- #019 Sampling, Testing and Monitoring Procedures.
- #020 Recordkeeping.
- #021 Property Rights.
- #022 Alternative Operating Scenarios.
- #023 Reporting
- #024 Report Format

### Section C. Site Level State Only Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

### Section D. Source Level State Only Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

### Section E. Source Group Restrictions

- E-I: Restrictions



## **SECTION A. Table of Contents**

- E-II: Testing Requirements
- E-III: Monitoring Requirements
- E-IV: Recordkeeping Requirements
- E-V: Reporting Requirements
- E-VI: Work Practice Standards
- E-VII: Additional Requirements

### **Section F. Alternative Operating Scenario(s)**

- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements
- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

### **Section G. Emission Restriction Summary**

### **Section H. Miscellaneous**

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101A	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700714	6,365.000 CF/HR	NATURAL GAS
101B	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700679	6,365.000 CF/HR	NATURAL GAS
101C	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700665	6,365.000 CF/HR	NATURAL GAS
101D	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700974	6,365.000 CF/HR	NATURAL GAS
102A	1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN C-18626/1	6,365.000 CF/HR	NATURAL GAS
102B	1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN C-18625/	6,365.000 CF/HR	NATURAL GAS
102C	1480 BHP WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN 5283701028	6,365.000 CF/HR	NATURAL GAS
103A	REFRIGERANT COMPRESSOR, 840 BHP, WAKESHA F3524GSI, SN C-17098/B	4,600.000 CF/HR	NATURAL GAS
104	DEHYDRATOR/REBOILER	1,245.000 CF/HR	
106	GAS PROCESSING PLANT VENTING		
107	CONDENSATE TANKS (2)		
108	PROCESS HEATERS	1,960.000 CF/HR	
109	TRUCK LOADING FUGITIVES		
C101A	NSCR		
C101B	NSCR		
C101C	NSCR		
C101D	NSCR		
C102A	NSCR		
C102B	NSCR		
C102C	NSCR		
C103A	NSCR		
C104	FLARE FROM DEHYDRATOR		
C107	VRU FROM STORAGE TANKS (2)		
S101A	COMPRESSOR STACK		
S101B	COMPRESSOR STACK		
S101C	COMPRESSOR STACK		
S101D	COMPRESSOR STACK		
S102A	COMPRESSOR STACK		
S102B	COMPRESSOR STACK		
S102C	COMPRESSOR STACK		
S103A	COMPRESSOR STACK		
S104A	REBOILER STACK		
S104B	STACK FROM REBOILER		
S107	STACK FROM VRU		
S108	STACK FROM PROCESS HEATER		
Z106	FUGITIVE EMISSIONS		
Z109	FUGITIVES FROM TRUCK LOADING		



## PERMIT MAPS

PROC 101A → CNTL C101A → STAC S101A

PROC 101B → CNTL C101B → STAC S101B

PROC 101C → CNTL C101C → STAC S101C

PROC 101D → CNTL C101D → STAC S101D

PROC 102A → CNTL C102A → STAC S102A

PROC 102B → CNTL C102B → STAC S102B

PROC 102C → CNTL C102C → STAC S102C

PROC 103A → CNTL C103A → STAC S103A

PROC 104 → CNTL C104 → STAC S104A  
→ STAC S104B

PROC 106 → STAC Z106

PROC 107 → CNTL C107 → STAC S107

PROC 108 → STAC S108

PROC 109 → STAC Z109

**SECTION B. General State Only Requirements****#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 I.**

- (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.

**SECTION B. General State Only Requirements**

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

- (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:

**SECTION B. General State Only Requirements**

- (1) Enforcement action
- (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:



**SECTION B. General State Only Requirements**

(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 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 NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> 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 PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> 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:

**SECTION B. General State Only Requirements**

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

**SECTION B. General State Only Requirements**

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

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

**#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

**SECTION B. General State Only Requirements**

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.

**#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.

**SECTION B. General State Only Requirements****#023 [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.

**#024 [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 §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the act.

**# 002 [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) Not applicable

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

**SECTION C. Site Level Requirements**

(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.

(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 §123.31]****Limitations**

(a) 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

**# 005 [25 Pa. Code §123.41]****Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.

(2) Equal to or greater than 60% at any time.

**# 006 [25 Pa. Code §123.42]****Exceptions**

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission 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).

(4) Not applicable

**# 007 [25 Pa. Code §129.14]****Open burning operations**

(a) [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

**SECTION C. Site Level Requirements**

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) - (5) [Not applicable]
- (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:

**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) [Not applicable]

(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.

[This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of Solid Waste Management Act, 35 P.S. Section 6018.610(3), or any other provision of Solid Waste Management Act.]

**II. TESTING REQUIREMENTS.**

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for



**SECTION C. Site Level Requirements**

purposes including determining malfunctions, or determining compliance with any applicable requirements.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals  
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Test methods and procedures.**

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the standards in §§60.482-1a through 60.482-10a, 60.483a, and 60.484a as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 of this part. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.

(2) A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 to this part, section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in §60.486a(e)(8). Divide the average arithmetic difference of the initial and post-test calibration response by the corresponding calibration gas value for each scale and multiply by 100 to express the calibration drift as a percentage.

(i) If a calibration drift assessment shows a negative drift of more than 10 percent, then all equipment with instrument readings between the appropriate leak definition and the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) that was monitored since the last calibration must be re-monitored.

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

(c) The owner or operator shall determine compliance with the no-detectable-emission standards in §§60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 of appendix A-7 of this part shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d)(1) and (2) of this section shall be used to resolve the disagreement.

**SECTION C. Site Level Requirements**

(e) The owner or operator shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H<sub>2</sub>O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

(1) Method 22 of appendix A-7 of this part shall be used to determine visible emissions.

(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{\max} = K1 + K2HT$$

Where:

$V_{\max}$  = Maximum permitted velocity, m/sec (ft/sec).

HT = Net heating value of the gas being combusted, MJ/scm (Btu/scf).

K1 = 8.706 m/sec (metric units) = 28.56 ft/sec (English units).

K2 = 0.7084 m<sup>4</sup>/(MJ-sec) (metric units) = 0.087 ft<sup>4</sup>/(Btu-sec) (English units).

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

[Equation omitted. Refer to regulation for exact formula notation.]

Where:

K = Conversion constant,  $1.740 \times 10^{-7}$  (g-mole)(MJ)/(ppm-scm-kcal) (metric units) =  $4.674 \times 10^{-6}$  [(g-mole)(Btu)/(ppm-scf-kcal)] (English units).

$C_i$  = Concentration of sample component "i," ppm

$H_i$  = net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole.

(5) Method 18 of appendix A-6 to this part and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference, see § 60.17) shall be used to determine the concentration of sample component "i." ASTM D6420-18 (incorporated by reference, see § 60.17) may be used in lieu of Method 18, under the conditions specified in paragraphs (g)(5)(i) through (iii) of this section.

(i) If the target compounds are all known and are all listed in Section 1.1 of ASTM D6420-18 as measurable.

(ii) ASTM D6420-18 may not be used for methane and ethane.

(iii) ASTM D6420-18 may not be used as a total VOC method.

(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference-see §60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D of appendix A-7 of this part, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

(h) [Not Applicable. Provision on alternative standards.]

**SECTION C. Site Level Requirements****III. MONITORING REQUIREMENTS.****# 010 [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.

**IV. RECORDKEEPING REQUIREMENTS.****# 011 [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.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a]****Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Recordkeeping requirements.**

(a)

(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(3) The owner or operator shall record the information specified in paragraphs (a)(3)(i) through (v) of this section for each monitoring event required by §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a.

- (i) Monitoring instrument identification.
- (ii) Operator identification.
- (iii) Equipment identification.
- (iv) Date of monitoring.
- (v) Instrument reading.

(b) When each leak is detected as specified in §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7a(c) and no leak has been detected during those 2 months.

(3) [Reserved]

(4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be nonreparable, except when a pump is repaired by eliminating indications of liquids dripping.

**SECTION C. Site Level Requirements**

- (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
- (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (9) The date of successful repair of the leak.
- (d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482-10a shall be recorded and kept in a readily accessible location:
- (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
  - (2) The dates and descriptions of any changes in the design specifications.
  - (3) A description of the parameter or parameters monitored, as required in §60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
  - (4) Periods when the closed vent systems and control devices required in §§60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame.
  - (5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a.
- (e) The following information pertaining to all equipment subject to the requirements in §§60.482-1a to 60.482-10a shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for equipment subject to the requirements of this subpart.
  - (2)
    - (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482-2a(e), 60.482-3a(i), and 60.482-7a(f).
    - (ii) The designation of equipment as subject to the requirements of §60.482-2a(e), §60.482-3a(i), or §60.482-7a(f) shall be signed by the owner or operator. Alternatively, the owner or operator may establish a mechanism with their permitting authority that satisfies this requirement.
  - (3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4a.
  - (4)
    - (i) The dates of each compliance test as required in §§60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f).
    - (ii) The background level measured during each compliance test.
    - (iii) The maximum instrument reading measured at the equipment during each compliance test.
  - (5) A list of identification numbers for equipment in vacuum service.
  - (6) A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr in accordance with §60.482-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
  - (7) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
  - (8) Records of the information specified in paragraphs (e)(8)(i) through (vi) of this section for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of this part and §60.485a(b).
    - (i) Date of calibration and initials of operator performing the calibration.
    - (ii) Calibration gas cylinder identification, certification date, and certified concentration.
    - (iii) Instrument scale(s) used.
    - (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of this part.
    - (v) Results of each calibration drift assessment required by §60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value).
    - (vi) If an owner or operator makes their own calibration gas, a description of the procedure used.
  - (9) [Reserved]
  - (10) Records of each release from a pressure relief device subject to §60.482-4a.
- (f) The following information pertaining to all valves subject to the requirements of §60.482-7a(g) and (h), and all pumps subject to the requirements of §60.482-2a(g) shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an

**SECTION C. Site Level Requirements**

explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) [Not Applicable. Provision on alternative standards.]

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

- (1) Design criterion required in §§60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
- (2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480a(d):

- (1) An analysis demonstrating the design capacity of the affected facility,
- (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
- (3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of §60.7(b) and (d) do not apply to affected facilities subject to this subpart.

(l) Any records required to be maintained by this subpart that are submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[72 FR 64883, Nov. 16, 2007, as amended at 89 FR 43071, May 16, 2024]

**V. REPORTING REQUIREMENTS.****# 013 [25 Pa. Code §135.21]****Emission statements**

(a) Except as provided in subsection (d), this section applies to stationary sources or facilities:

(1) Located in an area designated by the Clean Air Act as a marginal, moderate, serious, severe or extreme ozone nonattainment area and which emit oxides of nitrogen or VOC.

(2) Not located in an area described in subparagraph (1) and included in the Northeast Ozone Transport Region which emit or have the potential to emit 100 tons or more oxides of nitrogen or 50 tons or more of VOC per year.

(b) The owner or operator of each stationary source emitting oxides of nitrogen or VOC's shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

(c) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M. Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:

- (1) A more frequent submission is required by the EPA.

**SECTION C. Site Level Requirements**

(2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.

(d) Subsection (a) does not apply to a class or category of stationary sources which emits less than 25 tons per year of VOC's or oxides of nitrogen, if the Department in its submissions to the Administrator of the EPA under section 182(a)(1) or (3)(B)(ii) of the Clean Air Act (42 U.S.C.A. 7511a(a)(1) or (3)(B)(ii)) provides an inventory of emissions from the class or category of sources based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator. The Department will publish in the Pennsylvania Bulletin a notice of the lists of classes or categories of sources which are exempt from the emission statement requirement under this subsection.

**# 014 [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 preceding 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.

**# 015 [25 Pa. Code §135.4]****Report format**

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

**# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487a]****Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Reporting requirements.**

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date. Beginning on July 15, 2025, or once the report template for this subpart has been available on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for 1 year, whichever date is later, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart and following the procedure specified in paragraph (g) of this section. The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

(b) The initial semiannual report to the Administrator shall include the following information:

- (1) Process unit identification.
- (2) Number of valves subject to the requirements of §60.482-7a, excluding those valves designated for no detectable emissions under the provisions of §60.482-7a(f).
- (3) Number of pumps subject to the requirements of §60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of §60.482-2a(e) and those pumps complying with §60.482-2a(f).
- (4) Number of compressors subject to the requirements of §60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of §60.482-3a(i) and those compressors complying with §60.482-3a(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486a:

- (1) Process unit identification.
- (2) For each month during the semiannual reporting period,
  - (i) Number of valves for which leaks were detected as described in §60.482-7a(b) or §60.483-2a,
  - (ii) Number of valves for which leaks were not repaired as required in §60.482-7a(d)(1),
  - (iii) Number of pumps for which leaks were detected as described in §60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),

**SECTION C. Site Level Requirements**

- (iv) Number of pumps for which leaks were not repaired as required in §60.482-2a(c)(1) and (d)(6),
- (v) Number of compressors for which leaks were detected as described in §60.482-3a(f),
- (vi) Number of compressors for which leaks were not repaired as required in §60.482-3a(g)(1), and
- (vii) - (x) [Reserved]

(xi) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) of this section if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) [Not Applicable. Provision on alternative standards.]

(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a state under section 111(c) of the CAA, approves reporting requirements or an alternative means of compliance surveillance adopted by such state. In that event, affected sources within the state will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the state. The EPA will not approve a waiver of electronic reporting to the EPA in delegating enforcement authority. Thus, electronic reporting to the EPA cannot be waived, and as such, the provisions of this paragraph cannot be used to relieve owners or operators of affected facilities of the requirement to submit the electronic reports required in this section to the EPA.

(g) If an owner or operator is required to submit notifications or reports following the procedure specified in this paragraph (g), the owner or operator must submit notifications or reports to the EPA via CEDRI, which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the owner or operator. Do not use CEDRI to submit information the owner or operator claims as CBI. Although the EPA does not expect persons to assert a claim of CBI, if you an owner or operator wishes to assert a CBI claim for some of the information in the report or notification, the owner or operator must submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in paragraphs (g)(1) and (2) of this section. Clearly mark the part or all of the information claimed to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The owner or operator must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph (g).

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the SOCMI NSPS Sector Lead. Owners and operators who do not have their own file sharing service and who require assistance with submitting large electronic files that exceed the file size limit for email attachments should email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link.

(2) If an owner or operator cannot transmit the file electronically, the owner or operator may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the SOCMI NSPS Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(h) Owners and operators required to electronically submit notifications or reports through CEDRI in the EPA's CDX may

**SECTION C. Site Level Requirements**

assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, owners and operators must meet the requirements outlined in paragraphs (h)(1) through (7) of this section.

(1) The owner or operator must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) The owner or operator must submit notification to the Administrator in writing as soon as possible following the date the owner or operator first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) The owner or operator must provide to the Administrator a written description identifying:

- (i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
- (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;
- (iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which the owner or operator proposes to report, or if the owner or operator has already met the reporting requirement at the time of the notification, the date the report was submitted.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(i) Owners and operators required to electronically submit notifications or reports through CEDRI in the EPA's CDX may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, owners and operators must meet the requirements outlined in paragraphs (i)(1) through (5) of this section.

(1) An owner or operator may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(2) The owner or operator must submit notification to the Administrator in writing as soon as possible following the date the owner or operator first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) The owner or operator must provide to the Administrator:

- (i) A written description of the force majeure event;
- (ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;
- (iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which the owner or operator proposes to report, or if the owner or operator has already met the reporting requirement at the time of the notification, the date the report was submitted.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

[72 FR 64883, Nov. 16, 2007, as amended at 89 FR 43071, May 16, 2024]

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

**# 017 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

a. If required by Section 112(r) of the Clean Air Act, the owner or operator of the facility shall develop and implement an



**SECTION C. Site Level Requirements**

accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

b. The owner or operator of the facility shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The owner or operator of the facility shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

i. The owner or operator of the facility shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

A. Three years after the date on which a regulated substance is first listed under § 68.130; or,

B. The date on which a regulated substance is first present above a threshold quantity in a process.

ii. The owner or operator of the facility shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

iii. The owner or operator of the facility shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

c. As used in this condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

**# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[This condition is derived from 40 CFR 60 Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015. This federal regulation is not yet available in the AIMS software.]

§ 60.5371 What standards apply to super-emitter events?

This section applies to super-emitter events. For purposes of this section, a super-emitter event is defined as any emissions event that is located at an individual well site or compressor station and that is detected using remote detection methods and has a quantified emission rate of 100 kg/hr of methane or greater. Upon receiving a notification of a super emitter event issued by the EPA under § 60.5371b(c), owners or operators must take the actions listed in paragraphs (a) and (b) of this section. Within 5 calendar days of receiving a notification from the EPA of a super-emitter event, the owner or operator of an oil and natural gas facility (e.g., a well site, centralized production facility, natural gas processing plant, or compressor station) must initiate a super-emitter event investigation.

(a) Identification of super-emitter events.

(1) If you do not own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the notification subject to the regulation under this subpart, report this result to the EPA under paragraph (e) of this section. Your super-emitter event investigation is deemed complete under this subpart.

(2) If you own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the notification subject to regulation under this subpart, you must investigate to determine the source of super-emitter event. The investigation may include but is not limited to the actions specified below in paragraphs (a)(2)(i) through (iii) of this section.

(i) Review any maintenance activities or process activities from the affected facilities subject to regulation under this

**SECTION C. Site Level Requirements**

subpart, starting from the date of detection of the super-emitter event as identified in the notification, until the date of investigation, to determine if the activities indicate any potential source(s) of the super-emitter event emissions.

(ii) Review all monitoring data from control devices (e.g., flares) from the affected facilities subject to regulation under this subpart from the initial date of detection of the super-emitter event as identified in the notification, until the date of receiving the notification from the EPA to identify malfunctions of control devices or periods when the control devices were not in compliance with applicable requirements and that indicate a potential source of the super-emitter event emissions.

(iii) Screen the entire well site or compressor station with OGI, or Method 21 of appendix A-7 to this part, or an alternative test method(s) approved per § 60.5398b(d), to determine if a super-emitter event is present.

(b) Super-emitter event report. For equipment subject to regulation under this subpart, you must submit the results of the super-emitter event investigation conducted under paragraph (a) of this section to the EPA in accordance with paragraph (b)(1) of this section. If the super-emitter event (i.e., emission at 100 kg/hr of methane or more) is ongoing at the time of the initial report, submit the additional information in accordance with paragraph (b)(2) of this section. You must attest to the information included in the report as specified in paragraph (b)(3) of this section.

(1) Within 15 days of receiving a notification from the EPA under § 60.5371b(c), you must submit a report of the super-emitter event investigation conducted under paragraph (a) of this section through the Super-Emitter Program Portal. You must include the applicable information in paragraphs (b)(1)(i) through (viii) of this section in the report. If you have identified a demonstrable error in the notification, the report may include a statement of the demonstrable error.

(i) Notification Report ID of the super-emitter event notification.

(ii) Identification of whether you are the owner or operator of an oil and natural gas facility within 50 meters from the latitude and longitude provided in the EPA notification. If you do not own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the EPA notification, you are not required to report the information in paragraphs (b)(1)(iii) through (viii) of this section.

(iii) General identification information for the facility, including, facility name, the physical address, applicable ID Number (e.g., EPA ID Number, API Well ID Number), the owner or operator or responsible official (where applicable) and their email address.

(iv) Identification of whether there is an affected facility or associated equipment subject to regulation under this subpart at a well site or compressor station you own or operate within 50 meters from the latitude and longitude provided in the EPA notification.

(v) Indication of whether you were able to identify the source of the super-emitter event. If you indicate you were unable to identify the source of the super-emitter event, you must certify that all applicable investigations specified in paragraphs (d)(6)(i) through (v) of this section have been conducted for all affected facilities and associated equipment subject to this subpart that are at this oil and natural gas facility, and you have determined that the affected facilities and associated equipment are not the source of the super-emitter event. If you indicate that you were not able to identify the source of the super-emitter event, you are not required to report the information in paragraphs (b)(1)(vi) through (viii) of this section.

(vi) The source(s) of the super-emitter event.

(vii) Identification of whether the source of the super-emitter event is an affected facility or associated equipment subject to regulation under of this subpart. If the source of the super-emitter event is equipment subject to regulation under this subpart, identify the applicable regulation(s) under this subpart.

(viii) Indication of whether the super-emitter event is ongoing at the time of the initial report submittal (i.e., emission at 100 kg/hr of methane or more).

(A) If the super-emitter event is not ongoing at the time of the initial report submittal, provide the estimated date and time the super-emitter event ended.

(B) If the super-emitter event is ongoing at the time of the initial report submittal, provide a short narrative of your plan to end the super-emitter event, including the targeted end date for the efforts to be completed and the super-emitter event ended.

(2) If the super-emitter event is ongoing at the time of the initial report submittal, within 5 business days of the date the super-emitter event ends, you must update your initial report through the Super-Emitter Program Portal (available at <http://www.epa.gov/super-emitter>) to provide the end date and time of the super-emitter event.

(3) You must sign the following attestation must be signed by the owner or operator into when submitting data into the Super-Emitter Program Portal: "I certify that the information provided in this report regarding the specified super-emitter event was prepared under my direction or supervision. I further certify that the investigations were conducted, and this report was prepared pursuant to the requirements of § 60.5371(a) and (b). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that knowingly false statements may be punishable by fine or imprisonment."

**SECTION C. Site Level Requirements**

[89 FR 17035, Mar. 8, 2024]

- # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10a]**  
**Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006**  
**Standards: Closed vent systems and control devices.**
- (a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.
- (b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume (ppmv), whichever is less stringent.
- (c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 ppmv, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C.
- (d) Flares used to comply with this subpart shall comply with the requirements of §60.18.
- (e) Owners or operators of control devices 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.
- (f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (2) of this section.
- (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (ii) of this section:
- (i) Conduct an initial inspection according to the procedures in §60.485a(b); and
  - (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
- (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
- (i) Conduct an initial inspection according to the procedures in §60.485a(b); and
  - (ii) Conduct annual inspections according to the procedures in §60.485a(b).
- (g) Leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.
- (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
  - (2) Repair shall be completed no later than 15 calendar days after the leak is detected.
- (h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- (i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.
- (j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (2) of this section:
- (1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and
  - (2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

**SECTION C. Site Level Requirements**

- (k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (3) of this section:
- (1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
  - (2) The process unit within which the closed vent system is located becomes an affected facility through § 60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
  - (3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.
- (l) The owner or operator shall record the information specified in paragraphs (l)(1) through (5) of this section.
- (1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
  - (2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
  - (3) For each inspection during which a leak is detected, a record of the information specified in §60.486a(c).
  - (4) For each inspection conducted in accordance with §60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
  - (5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

**# 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals  
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Standards: General.**

- (a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482-1a through 60.482-10a or §60.480a(e) for all equipment within 180 days of initial startup.
- (b) Compliance with §§60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485a.
- (c) [Not applicable]
- (d) Equipment that is in vacuum service is excluded from the requirements of §§60.482-2a through 60.482-10a if it is identified as required in §60.486a(e)(5).

[All other requirements not applicable]

**# 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals  
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Standards: Pumps in light liquid service.**

- (a)
- (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485a(b), except as provided in §60.482-1a(c) and (f) and paragraphs (d), (e), and (f) of this section. A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in §60.482-1a(c) and paragraphs (d), (e), and (f) of this section.
  - (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in §60.482-1a(f).

**SECTION C. Site Level Requirements**

(b)

(1) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of this section.

(i) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers;

(ii) 2,000 ppm or greater for all other pumps.

(2) If there are indications of liquids dripping from the pump seal, the owner or operator shall follow the procedure specified in either paragraph (b)(2)(i) or (ii) of this section. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in paragraph (b)(1)(i) or (ii) of this section, whichever is applicable.

(i) Monitor the pump within 5 days as specified in §60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in paragraph (b)(1)(i) or (ii) of this section, whichever is applicable. The leak shall be repaired using the procedures in paragraph (c) of this section.

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in paragraph (c) of this section or by eliminating the visual indications of liquids dripping.

(c)

(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (c)(2)(i) and (ii) of this section, where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in paragraphs (d)(1) through (6) of this section are met.

(1) Each dual mechanical seal system is:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482-10a; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)

(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B) of this section prior to the next required inspection.

(A) Monitor the pump within 5 days as specified in §60.485a(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 2,000 ppm or greater is measured, a leak is detected.

(B) Designate the visual indications of liquids dripping as a leak.

(5)

(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm.

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in paragraph (d)(5)(ii) of this section, a leak is detected.

(6)

(i) When a leak is detected pursuant to paragraph (d)(4)(ii)(A) of this section, it shall be repaired as specified in paragraph (c) of this section.

(ii) A leak detected pursuant to paragraph (d)(5)(iii) of this section shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to paragraph (d)(4)(ii)(B) of this section shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

**SECTION C. Site Level Requirements**

(e) Any pump that is designated, as described in §60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

- (1) Has no externally actuated shaft penetrating the pump housing;
- (2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485a(c); and
- (3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482-10a, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in §60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

- (1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
- (2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

**# 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4a]****Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: Pressure relief devices in gas/vapor service.**

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485a(c).

(b)

(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482-9a.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485a(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482-10a is exempted from the requirements of paragraphs (a) and (b) of this section.

(d)

(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482-9a.

**# 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6a]****Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: Open-ended valves or lines.**

**SECTION C. Site Level Requirements**

(a)

(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and paragraphs (d) and (e) of this section.

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b), and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

**# 024 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals  
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Standards: Valves in gas/vapor service and in light liquid service.**

(a)

(1) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485a(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section, §60.482-1a(c) and (f), and §§60.483-1a and 60.483-2a.

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(2)(i) or (ii), except for a valve that replaces a leaking valve and except as provided in paragraphs (f), (g), and (h) of this section, §60.482-1a(c), and §§60.483-1a and 60.483-2a.

(i) Monitor the valve as in paragraph (a)(1) of this section. The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(ii) [Not Applicable. Provision on alternative standards.]

(b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(c)

(1)

(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, an owner or operator may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The owner or operator must keep records of the valves assigned to each subgroup.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d)

(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

**SECTION C. Site Level Requirements**

- (2) Replacement of bonnet bolts;
  - (3) Tightening of packing gland nuts;
  - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in §60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:
- (1) Has no external actuating mechanism in contact with the process fluid,
  - (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485a(c), and
  - (3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in §60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
- (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section, and
  - (2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in §60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
- (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
  - (2) The process unit within which the valve is located either:
    - (i) Becomes an affected facility through §60.14 or §60.15 and was constructed on or before January 5, 1981; or
    - (ii) Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator.
  - (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

**# 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals  
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy  
liquid service.**

- (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the owner or operator shall follow either one of the following procedures:
- (1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485a(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.
  - (2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.



**SECTION C. Site Level Requirements**

(c)

(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9a.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under §§60.482-2a(c)(2) and 60.482-7a(e).

**# 026 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9a]****Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: Delay of repair.**

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves and connectors will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482-10a.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

**# 027 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5360]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution What is the purpose of this subpart?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

This subpart establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO<sub>2</sub>) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011.

**# 028 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution Am I subject to this subpart?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

**SECTION C. Site Level Requirements**

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 (g) of this section for which you commence construction, modification or reconstruction after August 23, 2011.

(a)-(b) Not applicable.

(c) Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. 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)-(e) Not applicable.

(f) The group of all equipment, except compressors, within a process unit is an affected facility.

(1) Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(2) Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 of this subpart.

(3) The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

(g)-(h) Not applicable.

**# 029 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385]  
Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution  
What standards apply to reciprocating compressor affected facilities?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

You must comply 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) Before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

(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 emissions from the rod packing using a rod packing emissions collection system which operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of §60.5411(a).

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

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

**SECTION C. Site Level Requirements**

(d) You must perform the required notification, recordkeeping, and reporting as required by §60.5420.

**# 030 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5400]  
Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution  
What equipment leak standards apply to affected facilities at an onshore natural gas processing plant?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

This section applies to the group of all equipment, except compressors, within a process unit.

(a) You must comply with the requirements of §§60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-10a, except as provided in §60.5401.

(b) [Not Applicable. Provision on alternative standards.]

(c) You may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required in this subpart according to the requirements of §60.5402 of this subpart.

(d) You must comply with the provisions of §60.485a of this part except as provided in paragraph (f) of this section.

(e) You must comply with the provisions of §§60.486a and 60.487a of this part except as provided in §§60.5401, 60.5421, and 60.5422 of this part.

(f) You must use the following provision instead of §60.485a(d)(1): Each piece of equipment is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described in ASTM E169-93, E168-92, or E260-96 (incorporated by reference as specified in §60.17) must be used.

**# 031 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5401]  
Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution  
What are the exceptions to the equipment leak standards for affected facilities at onshore natural gas processing plants?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

(a) You may comply with the following exceptions to the provisions of §60.5400(a) and (b).

(b)(1) Each pressure relief device in gas/vapor service may be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in §60.485a(b) except as provided in §60.5400(c) and in paragraph (b)(4) of this section, and §60.482-4a(a) through (c) of subpart VVa.

(2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(3)(i) When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in §60.482-9a.

(ii) A first attempt at repair must be made no later than 5 calendar days after each leak is detected.

**SECTION C. Site Level Requirements**

(4)(i) Any pressure relief device that is located in a nonfractionating plant that is monitored only by non-plant personnel may be monitored after a pressure release the next time the monitoring personnel are on-site, instead of within 5 days as specified in paragraph (b)(1) of this section and §60.482-4a(b)(1) of subpart VVa.

(ii) No pressure relief device described in paragraph (b)(4)(i) of this section must be allowed to operate for more than 30 days after a pressure release without monitoring.

(c) Sampling connection systems are exempt from the requirements of §60.482-5a.

(d) Pumps in light liquid service, valves in gas/vapor and light liquid service, pressure relief devices in gas/vapor service, and connectors in gas/vapor service and in light liquid service that are located at a nonfractionating plant that does not have the design capacity to process 283,200 standard cubic meters per day (scmd) (10 million standard cubic feet per day) or more of field gas are exempt from the routine monitoring requirements of §§60.482-2a(a)(1), 60.482-7a(a), and paragraph (b)(1) of this section.

(e) Pumps in light liquid service, valves in gas/vapor and light liquid service, pressure relief devices in gas/vapor service, and connectors in gas/vapor service and in light liquid service within a process unit that is located in the Alaskan North Slope are exempt from the routine monitoring requirements of §§60.482-2a(a)(1), 60.482-7a(a), and paragraph (b)(1) of this section.

(f) An owner or operator may use the following provisions instead of §60.485a(e):

(1) Equipment is in heavy liquid service if the weight percent evaporated is 10 percent or less at 150 °C (302 °F) as determined by ASTM Method D86-96 (incorporated by reference as specified in §60.17).

(2) Equipment is in light liquid service if the weight percent evaporated is greater than 10 percent at 150 °C (302 °F) as determined by ASTM Method D86-96 (incorporated by reference as specified in §60.17).

(g) An owner or operator may use the following provisions instead of §60.485a(b)(2): A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in §60.486a(e)(8). Divide these readings by the initial calibration values for each scale and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

**# 032 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5410]**

**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**  
**How do I demonstrate initial compliance with the standards for my gas well affected facility, centrifugal compressor, reciprocating compressor, pneumatic controller, storage vessel, equipment leaks, sweetening unit affected facilities, at onshore natural gas processing plants?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

(a) - (b) [Not applicable]

(c) To achieve initial compliance with the standards for each reciprocating compressor affected facility you must comply with paragraphs (c)(1) through (4) of this section.

**SECTION C. Site Level Requirements**

- (1) If complying with §60.5385(a)(1) or (2), during the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.
- (2) If complying with §60.5385(a)(3), you must operate the rod packing emissions collection system under negative pressure and route emissions to a process through a closed vent system that meets the requirements of §60.5411(a).
- (3) You must submit the initial annual report for your reciprocating compressor as required in §60.5420(b).
- (4) You must maintain the records as specified in §60.5420(c)(3) for each reciprocating compressor affected facility.
- (d) [Not applicable]
- (e) [Reserved]
- (f) For affected facilities at onshore natural gas processing plants, initial compliance with the VOC requirements is demonstrated if you are in compliance with the requirements of §60.5400.
- (g) - (i) [Not applicable]

**# 033 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415]  
Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution  
How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor, stationary reciprocating compressor, pneumatic controller, storage vessel affected facilities, and my affected facilities at onshore natural gas processing plants?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

- (a) - (b) [Not applicable]
- (c) For each reciprocating compressor affected facility complying with §60.5385(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 §60.5385(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, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
  - (2) You must submit the annual report as required in §60.5420(b) and maintain records as required in §60.5420(c)(3).
  - (3) You must replace the reciprocating compressor rod packing before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.
  - (4) You must operate the rod packing emissions collection system under negative pressure and continuously comply with the closed vent requirements in §60.5416(a) and (b).
- (d) - (e) [Not applicable]
- (f) For affected facilities at onshore natural gas processing plants, continuous compliance with VOC requirements is demonstrated if you are in compliance with the requirements of §60.5400.
- (g) [Not applicable]

**# 034 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420]  
Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**

**SECTION C. Site Level Requirements****What are my notification, reporting, and recordkeeping requirements?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

(a) You must submit the 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 §60.5365 that was constructed, modified, or reconstructed during the reporting period.

(1) If you own or operate a gas well, pneumatic controller, centrifugal compressor, reciprocating compressor or storage vessel affected facility you are not required to submit the notifications required in §60.7(a)(1), (3), and (4).

(2) [Not applicable]

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (6) of this section to the Administrator and performance test reports as specified in paragraph (b)(7) or (8) 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 §60.5410. 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 (6) 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.

(i) The company name and address of the affected facility.

(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 (ii) of this section.

(i) The cumulative number of hours of operation or the number of months since initial startup, since October 15, 2012, or since the previous reciprocating compressor rod packing replacement, whichever is later.

(ii) Records of deviations specified in paragraph (c)(3)(iii) of this section that occurred during the reporting period.

(5) - (8) [Not applicable]

(c) Recordkeeping requirements. You must maintain the records identified as specified in §60.7(f) and in paragraphs (c)(1) through (14) 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.

(1) - (2) [Not applicable]

(3) For each reciprocating compressors affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii)

**SECTION C. Site Level Requirements**

of this section.

- (i) Records of the cumulative number of hours of operation or number of months since initial startup or October 15, 2012, or the previous replacement of the reciprocating compressor rod packing, whichever is later.
- (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 §60.5385(a)(3).
- (iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385.

(4) - (14) [Not applicable]

**# 035 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5421]**

**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution  
What are my additional recordkeeping requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

- (a) You must comply with the requirements of paragraph (b) of this section in addition to the requirements of §60.486a.
- (b) The following recordkeeping requirements apply to pressure relief devices subject to the requirements of §60.5401(b)(1) of this subpart.
  - (1) When each leak is detected as specified in §60.5401(b)(2), a weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. The identification on the pressure relief device may be removed after it has been repaired.
  - (2) When each leak is detected as specified in §60.5401(b)(2), the following information must be recorded in a log and shall be kept for 2 years in a readily accessible location:
    - (i) The instrument and operator identification numbers and the equipment identification number.
    - (ii) The date the leak was detected and the dates of each attempt to repair the leak.
    - (iii) Repair methods applied in each attempt to repair the leak.
    - (iv) "Above 500 ppm" if the maximum instrument reading measured by the methods specified in paragraph (a) of this section after each repair attempt is 500 ppm or greater.
    - (v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
    - (vi) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
    - (vii) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
    - (viii) Dates of process unit shutdowns that occur while the equipment is unrepaired.
    - (ix) The date of successful repair of the leak.
    - (x) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §60.482-4a(a). The designation of equipment subject to the provisions of §60.482-4a(a) must be signed by the owner or operator.

**SECTION C. Site Level Requirements****# 036 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422]  
Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution  
What are my additional reporting requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?**

[Following a Mar. 8, 2024 revision, the subpart heading now reads: Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015]

- (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).
- (b) An owner or operator must include the following information in the initial semiannual report in addition to the information required in §60.487a(b)(1) through (4): Number of pressure relief devices subject to the requirements of §60.5401(b) except for those pressure relief devices designated for no detectable emissions under the provisions of §60.482-4a(a) and those pressure relief devices complying with §60.482-4a(c).
- (c) An owner or operator must include the following information in all semiannual reports in addition to the information required in §60.487a(c)(2)(i) through (vi):
- (1) Number of pressure relief devices for which leaks were detected as required in §60.5401(b)(2); and
  - (2) Number of pressure relief devices for which leaks were not repaired as required in §60.5401(b)(3).

**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.



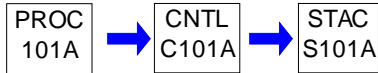
**SECTION D. Source Level Requirements**

Source ID: 101A

Source Name: 1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700714

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

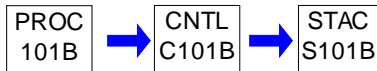
**SECTION D. Source Level Requirements**

Source ID: 101B

Source Name: 1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700679

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

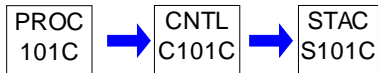
**SECTION D. Source Level Requirements**

Source ID: 101C

Source Name: 1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700665

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

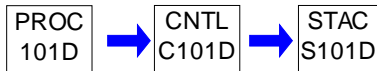
**SECTION D. Source Level Requirements**

Source ID: 101D

Source Name: 1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700974

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

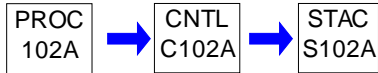
**SECTION D. Source Level Requirements**

Source ID: 102A

Source Name: 1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR,SN C-18626/1

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

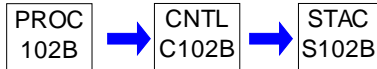
**SECTION D. Source Level Requirements**

Source ID: 102B

Source Name: 1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR,SN C-18625/

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

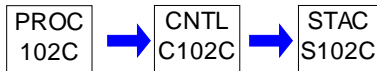
**SECTION D. Source Level Requirements**

Source ID: 102C

Source Name: 1480 BHP WAUKESHA L7042GSI,RESIDUE COMPRSSOR, SN 5283701028

Source Capacity/Throughput: 6,365.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: INLET &amp; RESIDUE COMPRESSORS

**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).

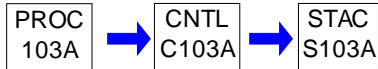
**SECTION D. Source Level Requirements**

Source ID: 103A

Source Name: REFRIGERANT CMPRSSR, 840 BHP, WAKESHA F3524GSI, SN C-17098/B

Source Capacity/Throughput: 4,600.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: REFRIGERANT COMPRESSOR

**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).



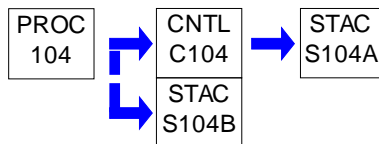
**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: DEHYDRATOR/REBOILER

Source Capacity/Throughput: 1,245.000 CF/HR

Conditions for this source occur in the following groups: § 63 SUBPART HH

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess 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.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO<sub>2</sub>, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input.

**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

VOC emissions from this source, as determined using GRI-GLYCalc computer software, or an alternative method as approved by the Department, shall not exceed 4.2 tons per year, calculated as a 12-month rolling total.

The Department reserves the right to require the permittee to install additional control device(s) to control VOC emissions from this source if this limit is exceeded.

[PA 10-359D]

**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.****# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) The permittee shall maintain records of calculated VOC emissions from this source, using GRI-GLYCalc computer software or an alternative method as approved by the Department.

**SECTION D. Source Level Requirements**

- (c) The permittee shall maintain monthly records of the amount of fuel combusted and hours of operation of this source.
- (d) The permittee shall maintain daily records of the throughput and glycol circulation rate of this source.
- (e) The permittee shall maintain records as required of the exhaust temperature from the condenser.
- (f) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

[PA 10-359D]

**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.**

**# 005 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

- (a) A Glycol Dehydrator using a condenser as an air cleaning device shall daily achieve an average final exhaust temperature of less than 110 degrees Fahrenheit (110°F). A record of final exhaust temperature and time observed shall be recorded at a minimum of twice per week on different days during daylight hours.
- (b) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[PA 10-359D]

**VII. ADDITIONAL REQUIREMENTS.**

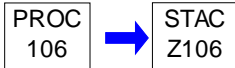
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 106

Source Name: GAS PROCESSING PLANT VENTING

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.13]****Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

**# 002 [25 Pa. Code §123.21]****General**

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 SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry 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.****# 003 [25 Pa. Code §129.137]****Fugitive emissions components**

(a) Applicability. This section applies to the owner or operator of a fugitive emissions component subject to § 129.131(a)(5) (relating to general provisions and applicability), located at one or more of the following:

- (1) - (2) [Do not apply]
- (3) A natural gas processing plant.

(b) - (d) [Do not apply]

(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 January 31, 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 January 31, 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.

**SECTION D. Source Level Requirements**

- (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:
- (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

**SECTION D. Source Level Requirements**

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:

(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 § 129.140(g) and submit the reports under § 129.140(k)(3)(vi).

**IV. RECORDKEEPING REQUIREMENTS.**

**# 004 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) The permittee shall maintain monthly records of the hours of operation of this source.

**SECTION D. Source Level Requirements**

(c) The permittee shall maintain monthly records of the amount of natural gas processed.

(d) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

[PA 10-359D]

**# 005 [25 Pa. Code §129.140]**

**Recordkeeping and reporting**

(a) Recordkeeping. The owner or operator of a source subject to § § 129.131—129.139 shall maintain the applicable records onsite or at the nearest local field office for 5 years. The records shall be made available to the Department upon request.

(b) Storage vessels. The records for each storage vessel must include the following, as applicable:

(1) The identification and location of each storage vessel subject to § 129.133 (relating to storage vessels). The location of the storage vessel shall be in latitude and longitude coordinates in decimal degrees to an accuracy and precision of 5 decimals of a degree using the North American Datum of 1983.

(2) Each deviation when the storage vessel was not operated in compliance with the requirements specified in § 129.133.

(3) The identity of each storage vessel removed from service under § 129.133(e) and the date on which it was removed from service.

(4) The identity of each storage vessel returned to service under § 129.133(f) and the date on which it was returned to service.

(5) The identity of each storage vessel and the VOC potential to emit calculation under § 129.133(a)(2).

(6) The identity of each storage vessel and the actual VOC emission calculation under § 129.133(c)(2)(i) including the following information:

(i) The date of each monthly calculation performed under § 129.133(c)(2)(i).

(ii) The calculation determining the actual VOC emissions each month.

(iii) The calculation demonstrating that the actual VOC emissions are less than 2.7 TPY determined as a 12-month rolling sum.

(7) The records documenting the time the skid-mounted or mobile storage vessel under § 129.133(d)(1) is located on site. If a skid-mounted or mobile storage vessel is removed from a site and either returned or replaced within 30 calendar days to serve the same or similar function, count the entire period since the original storage vessel was removed towards the number of consecutive days.

(8) The identity of each storage vessel required to reduce VOC emissions under § 129.133(b)(1) and the demonstration under § 129.133(b)(1)(iv).

(c) - (d) [Do not apply]

(e) Reciprocating compressors. The records for each reciprocating compressor must include the following, as applicable:

(1) For a reciprocating compressor under § 129.136(b)(1)(i) (relating to compressors), the following records:

(i) The cumulative number of hours of operation.

(ii) The date and time of each rod packing replacement.

(2) For a reciprocating compressor under § 129.136(b)(1)(ii), the following records:

(i) The number of months since the previous replacement of the rod packing.

(ii) The date of each rod packing replacement.

(3) - (4) [Do not apply]

(f) [Does not apply]

(g) Fugitive emissions components. The records for each fugitive emissions component must include the following, as applicable:

(1) - (2) [Do not apply]

(3) For a well site subject to § 129.137(c)(2) or (c)(3), a natural gas gathering and boosting

**SECTION D. Source Level Requirements**

station or a natural gas processing plant:

- (i) The fugitive emissions monitoring plan under § 129.137(g).
  - (ii) The records of each monitoring survey conducted under § 129.137(c)(2)(ii), (c)(3)(ii) or
- (e)(2). The monitoring survey must include the following information:
- (A) The facility name and location.
  - (B) The date, start time and end time of the survey.
  - (C) The name of the equipment operator performing the survey.
  - (D) The monitoring instrument used.
  - (E) The ambient temperature, sky conditions and maximum wind speed at the time of the survey.
  - (F) Each deviation from the monitoring plan or a statement that there were none.
  - (G) Documentation of each fugitive emission including:
    - (I) The identification of each component from which fugitive emissions were detected.
    - (II) The instrument reading of each fugitive emissions component that meets the definition of a leak under § 129.132(a) (relating to definitions, acronyms and EPA methods).
    - (III) The repair methods applied in each attempt to repair the component.
    - (IV) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered.
    - (V) The reason a component was placed on delay of repair.
    - (VI) The date of successful repair of the component.
    - (VII) If repair of the component was not completed during the monitoring survey in which the fugitive emissions were discovered, the information on the instrumentation or the method used to resurvey the component after repair.
- (h) - (j) [Do not apply]
- (k) [Printed under Reporting Requirements in this section of permit.]

**V. REPORTING REQUIREMENTS.**

**# 006 [25 Pa. Code §129.140]**

**Recordkeeping and reporting**

[25 Pa. Code § 129.140(k):]

(k) Reporting. The owner or operator of a source subject to § 129.131(a) (relating to general provisions and applicability) shall do the following:

(1) Submit an initial annual report to the Air Program Manager of the appropriate Department Regional Office by December 2, 2023, and annually thereafter on or before June 1.

(i) The responsible official must sign, date and certify compliance and include the certification in the initial report and each subsequent annual report.

(ii) The due date of the initial report may be extended with the written approval of the Air Program Manager of the appropriate Department Regional Office.

(2) Submit the reports under paragraph (3) in a manner prescribed by the Department.

(3) Submit the information specified in subparagraphs (i)—(ix) for each report as applicable:

(i) - (iii) [Do not apply]

(iv) Reciprocating compressors. The report for each reciprocating compressor must include the information specified in subsection (e) for the reporting period, as applicable.

(v) [Does not apply]

(vi) Fugitive emissions components. The report for each fugitive emissions component must include the records of each monitoring survey conducted during the reporting period as specified in subsection (g)(3)(ii).

(vii) - (ix) [Do not apply]

**VI. WORK PRACTICE REQUIREMENTS.**

**# 007 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

(a) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and

**SECTION D. Source Level Requirements**

in accordance with good air pollution control practices.

(b) The permittee shall install a device to measure the amount of natural gas processed during a calendar month.

[PA 10-359D]

**# 008 [25 Pa. Code §129.133]**

**Storage vessels**

(a) Applicability.

(1) Potential VOC emissions. Except as specified in subsections (c) and (d), this section applies to the owner or operator of a storage vessel subject to § 129.131(a)(1) (relating to general provisions and applicability) that has the potential to emit 2.7 TPY or greater VOC emissions.

(2) Calculation of potential VOC emissions.

(i) The potential VOC emissions in paragraph (1) must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput as defined in § 129.132 (relating to definitions, acronyms and EPA methods) prior to January 31, 2023, for an existing storage vessel.

(ii) The determination of potential VOC emissions may consider requirements under a legally and practically enforceable limit established in an operating permit or plan approval approved by the Department.

(iii) Vapor from the storage vessel that is recovered and routed to a process through a VRU is not required to be included in the determination of potential VOC emissions for purposes of determining applicability, if the owner or operator meets the following:

(A) The cover requirements in § 129.138(a) (relating to covers and closed vent systems).

(B) The closed vent system requirements in § 129.138(b).

(iv) If the apparatus that recovers and routes vapor to a process is removed from operation or is operated inconsistently with § 129.138, the owner or operator shall determine the storage vessel's potential VOC emissions under this paragraph within 30 calendar days of the date of apparatus removal or inconsistent operation.

b) VOC emissions limitations and control requirements. Except as specified in subsections (c) and (d), beginning December 2, 2023, the owner or operator of a storage vessel subject to this section shall reduce VOC emissions by 95.0% by weight or greater. The owner or operator shall comply with paragraph (1) or paragraph (2) as applicable.

(1) Route the VOC emissions to a control device. The owner or operator shall do the following:

(i) Equip the storage vessel with a cover that meets the requirements of § 129.138(a).

(ii) Connect the storage vessel to a control device or process through a closed vent system that meets the requirements of § 129.138(b).

(iii) Route the emissions from the storage vessel to a control device or a process that meets the applicable requirements of § 129.139 (relating to control devices).

(iv) Demonstrate that the VOC emissions are reduced as specified in § 129.139(k).

(2) Equip the storage vessel with a floating roof. The owner or operator shall install a floating roof that meets the requirements of 40 CFR 60.112b(a)(1) or (2) (relating to standard for volatile organic compounds (VOC)) and the relevant monitoring, inspection, recordkeeping and reporting requirements in 40 CFR Part 60, Subpart Kb (relating to standards of performance for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984).

(c) Exceptions.

(1) The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a storage vessel that maintains actual VOC emissions less than 2.7 TPY determined as a 12-month rolling sum. An owner or operator claiming this exception shall perform the compliance demonstration requirements under paragraph (2) and maintain the records under subsection (g), as applicable.

(2) The owner or operator of a storage vessel claiming exception under this subsection shall perform the following:

(i) Beginning on or before January 1, 2023, calculate the actual VOC emissions once per calendar month using a generally accepted model or calculation methodology. The monthly calculations must meet the following:

(A) Be separated by at least 15 calendar days but not more than 45 calendar days.

(B) Be based on the monthly average throughput for the previous 30 calendar days.

(ii) Comply with subsection (b) within 1 year of the date of the monthly calculation showing that actual VOC emissions from the storage vessel have increased to 2.7 TPY VOC or greater.



**SECTION D. Source Level Requirements**

(d) Exemptions. The emissions limitations and control requirements in subsection (b) do not apply to the owner or operator of a storage vessel that meets one or more of the following:

- (1) Is skid-mounted or permanently attached to something that is mobile for which records are available to document that it has been located at a site for less than 180 consecutive days. An owner or operator claiming this exemption shall maintain the records under subsection (g), as applicable.
- (2) Is used in the natural gas distribution segment.
- (3) Is controlled under 40 CFR Part 60, Subpart Kb or 40 CFR Part 63, Subpart G, Subpart CC, Subpart HH or Subpart WW.

(e) Requirements for a storage vessel removed from service. A storage vessel subject to this section that is removed from service is not an affected source for the period that it is removed from service if the owner or operator performs the following:

- (1) Completely empties and degasses the storage vessel so that the storage vessel no longer contains crude oil, condensate, produced water or intermediate hydrocarbon liquids. A storage vessel where liquid is left on walls, as bottom clingage or in pools due to floor irregularity is considered to be completely empty.
- (2) Submits a notification in the next annual report required under § 129.140(k)(1) (relating to recordkeeping and reporting) identifying each storage vessel removed from service during the reporting period and the date of its removal from service.

(f) Requirements for a storage vessel returned to service. The owner or operator of a storage vessel identified in subsection (e) that is returned to service shall submit a notification in the next annual report required under § 129.140(k)(1) identifying each storage vessel that has been returned to service during the reporting period and the date of its return to service.

(g) Recordkeeping and reporting requirements. The owner or operator of a storage vessel subject to this section shall maintain the records under § 129.140(b) and submit the reports under § 129.140(k)(3)(i).

**# 009 [25 Pa. Code §129.136]****Compressors**

(a) Applicability. This section applies to the owner or operator of a reciprocating compressor or centrifugal compressor subject to § 129.131(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) [Does not apply]

(b) VOC emissions control requirements for a reciprocating compressor. Beginning December 2, 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) December 2, 2022, for a reciprocating compressor rod packing that has not yet been replaced.
  - (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) December 2, 2025, for a reciprocating compressor rod packing that has not yet been replaced.

(2) Route the VOC emissions to a control device or a process that meets § 129.139 (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 § 129.138(a) (relating to covers and closed vent systems) and the closed vent system requirements of § 129.138(b).

(c) - (d) [Do not apply]

(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 § 129.140(e) (relating to recordkeeping and reporting) and submit the reports under § 129.140(k)(3)(iv).
- (2) [Does not apply]

**SECTION D. Source Level Requirements****# 010 [25 Pa. Code §129.138]****Covers and closed vent systems**

(a) Requirements for a cover on a storage vessel, reciprocating compressor or centrifugal compressor. The owner or operator shall perform the following for a cover of a source subject to § 129.133(b)(1)(i) or § 129.136(b)(2) or (c)(2) (relating to storage vessels; and compressors), as applicable:

(1) Ensure that the cover and all openings on the cover form a continuous impermeable barrier over each subject source as follows:

- (i) The entire surface area of the liquid in the storage vessel.
- (ii) The entire surface area of the liquid in the wet seal fluid degassing system of a centrifugal compressor.
- (iii) The rod packing emissions collection system of a reciprocating compressor.

(2) Ensure that each cover opening is covered by a gasketed lid or cap that is secured in a closed, sealed position except when it is necessary to use an opening for one or more of the following:

(i) To inspect, maintain, repair or replace equipment.

(ii) To route a liquid, gas, vapor or fume from the source to a control device or a process that meets the applicable requirements of § 129.139 (relating to control devices) through a closed vent system designed and operated in accordance with subsection (b).

(iii) To inspect or sample the material in a storage vessel.

(iv) To add material to or remove material from a storage vessel, including openings necessary to equalize or balance the internal pressure of the storage vessel following changes in the level of the material in the storage vessel.

(3) Ensure that each storage vessel thief hatch is equipped, maintained and operated with the following:

(i) A mechanism to ensure that the lid remains properly seated and sealed under normal operating conditions, including when working, standing or breathing, or when flash emissions may be generated.

(ii) A gasket made of a suitable material based on the composition of the fluid in the storage vessel and weather conditions.

(4) Conduct an initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days for defects that could result in air emissions. Defects include the following:

- (i) A visible crack, hole or gap in the cover.
- (ii) A visible crack, hole or gap between the cover and the separator wall.
- (iii) A broken, cracked or otherwise damaged seal or gasket on a closure device.
- (iv) A broken or missing hatch, access cover, cap or other closure device.

(5) Inspect only those portions of the cover that extend to or above the surface and the connections on those portions of the cover, including fill ports, access hatches and gauge wells that can be opened to the atmosphere for a storage vessel that is partially buried or entirely underground.

(6) Repair a detected leak or defect as specified in § 129.137(l) (relating to fugitive emissions components).

(7) Maintain the records under § 129.140(h) (relating to recordkeeping and reporting) and submit the report under § 129.140(k)(3)(vii).

(b) Requirements for a closed vent system. The owner or operator shall perform the following for each closed vent system installed on a source subject to § 129.133(b)(1)(ii), § 129.135(b)(1)(i) or (c)(1)(ii) (relating to natural gas-driven diaphragm pumps) or § 129.136(b)(2) or (c)(2):

(1) Design the closed vent system to route the liquid, gas, vapor or fume emitted from the source to a control device or process that meets the applicable requirements in § 129.139.

(2) Operate the closed vent system with no detectable emissions as determined by the following:

(i) Conduct an initial AVO inspection on or before January 31, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days for defects that could result in air emissions. Defects include the following:

- (A) A visible crack, hole or gap in piping.
- (B) A loose connection.
- (C) A liquid leak.
- (D) A broken or missing cap or other closure device.

(ii) Conducting a no detectable emissions inspection as specified in subsection (d) during the facility's scheduled LDAR inspection in accordance with § 129.137(c)(2)(ii) and (c)(3)(ii) or (e)(2).

(3) Repair a detected leak or defect as specified in § 129.137(l).

(4) Except as specified in subparagraph (iii), if the closed vent system contains one or more bypass devices that could be

**SECTION D. Source Level Requirements**

used to divert the liquid, gas, vapor or fume from routing to the control device or to the process under paragraph (1), perform one or more of the following:

(i) Install, calibrate, operate and maintain a flow indicator at the inlet to the bypass device so when the bypass device is open it does one of the following:

(A) Sounds an alarm.

(B) Initiates a notification by means of a remote alarm to the nearest field office.

(ii) Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using the following procedure:

(A) Installing either of the following:

(I) A car-seal.

(II) A lock-and-key configuration.

(B) Visually inspecting the mechanism in clause (A) to verify that the valve is maintained in the non-diverting position on or before January 31, 2023, with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.

(C) Maintaining the records under § 129.140(i)(4).

(iii) Subparagraphs (i) and (ii) do not apply to a low leg drain, high point bleed, analyzer vent, open-ended valve or line or safety device.

(5) Conduct an assessment that meets the requirements of subsection (c).

(6) Maintain the records under § 129.140(i) and submit the reports under § 129.140(k)(3)(viii).

(c) Requirements for closed vent system design and capacity assessment. An owner or operator that installs a closed vent system under subsection (b) shall perform a design and capacity assessment which must include the following:

(1) Be prepared under the supervision of an in-house engineer or qualified professional engineer.

(2) Verify the following:

(i) That the closed vent system is of sufficient design and capacity to ensure that the emissions from the emission source are routed to the control device or process.

(ii) That the control device or process is of sufficient design and capacity to accommodate the emissions from the emission source.

(3) Be certified, signed and dated by the engineer supervising the assessment, including the statement: "I certify that the closed vent design and capacity assessment was prepared under my supervision. I further certify that the assessment was conducted and this report was prepared under the requirements of 25 Pa. Code § 129.138(c). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information."

(d) No detectable emissions procedures. The owner or operator shall conduct the no detectable emissions inspection required under subsection (b)(2)(ii) by performing one of the following:

(1) Use OGI equipment that meets § 129.137(h).

(2) Use a gas leak detection instrument that meets § 129.137(i). The owner or operator may adjust the gas leak detection instrument readings as specified in § 129.137(k).

(3) Use another leak detection method approved by the Department.

(4) Determine if a potential leak interface operates with no detectable emissions, if the gas leak detection instrument reading is not a leak as defined in § 129.132(a) (relating to definitions, acronyms and EPA methods).

**# 011 [25 Pa. Code §129.139]****Control devices**

(a) Applicability. This section applies to the owner or operator of each control device that receives a liquid, gas, vapor or fume from a source subject to § 129.133(b)(1)(iii), § 129.135(b)(1)(ii) or (c)(1), or § 129.136(b)(2) or (c)(2) (relating to storage vessels; natural gas-driven diaphragm pumps; and compressors).

(1) The owner or operator shall perform the following:

(i) Operate each control device whenever a liquid, gas, vapor or fume is routed to the control device.

(ii) Maintain the records under § 129.140(j) (relating to recordkeeping and reporting) and submit the reports under § 129.140(k)(3)(ix).

(2) The owner or operator may route the liquid, gas, vapor or fume from more than one source subject to § 129.133(b)(1)(iii), § 129.135(b)(1)(ii) or (c)(1), or § 129.136(b)(2) or (c)(2) to a control device installed and operated under this section.

**SECTION D. Source Level Requirements**

(b) General requirements for a control device. The owner or operator of a control device subject to this section shall install and operate one or more control devices listed in subsections (c)—(i). The owner or operator shall meet the following requirements, as applicable:

(1) Operate the control device following the manufacturer's written operating instructions, procedures and maintenance schedule to ensure good air pollution control practices for minimizing VOC emissions.

(2) Ensure that the control device is maintained in a leak-free condition by conducting a physical integrity check according to the manufacturer's instructions, with monthly inspections separated by at least 15 calendar days but not more than 45 calendar days.

(3) Maintain a pilot flame while operating the control device and monitor the pilot flame by installing a heat sensing CPMS as specified under subsection (m)(3). If the heat sensing CPMS indicates the absence of the pilot flame or if the control device is smoking or shows other signs of improper equipment operation, ensure the control device is returned to proper operation by performing the following procedures:

(i) Checking the air vent for obstruction and clearing an observed obstruction.

(ii) Checking for liquid reaching the combustor.

(4) Operate the control device with no visible emissions, except for periods not to exceed a total of 1 minute during a 15-minute period as determined by conducting a visible emissions test according to Section 11 of EPA Method 22.

(i) Each monthly visible emissions test shall be separated by at least 15 calendar days but not more than 45 calendar days.

(ii) The observation period for the test in subparagraph (i) shall be 15 minutes.

(5) Repair the control device if it fails the visible emissions test of paragraph (4) as specified in subparagraph (i) or subparagraph (ii) and return the control device to compliant operation.

(i) The manufacturer's repair instructions, if available.

(ii) The best combustion engineering practice applicable to the control device if the manufacturer's repair instructions are not available.

(6) Ensure the control device passes the EPA Method 22 visual emissions test described in paragraph (4) following return to operation from a maintenance or repair activity.

(7) Record the inspection, repair and maintenance activities for the control device in a maintenance and repair log.

(c) Compliance requirements for a manufacturer-tested combustion device. The owner or operator of a control device subject to this section that installs a control device tested under 40 CFR 60.5413a(d) (relating to what are the performance testing procedures for control devices used to demonstrate compliance at my centrifugal compressor and storage vessel affected facilities?) shall meet subsection (b)(1)—(7) and the following:

(1) Maintain the inlet gas flow rate at less than or equal to the maximum flow rate specified by the manufacturer. This is confirmed by one of the following:

(i) Installing, operating and maintaining a flow CPMS that meets subsection (m)(1) and (2)(i) to measure gas flow rate at the inlet to the control device.

(ii) Conducting a periodic performance test under subsection (k) instead of installing a flow CPMS to demonstrate that the mass content of VOC in the gases vented to the device is reduced by 95.0% by weight or greater.

(2) Submit an electronic copy of the performance test results to the EPA as required by 40 CFR 60.5413a(d) in accordance with 40 CFR 60.5413a(e)(6).

(d) Compliance requirements for an enclosed combustion device. The owner or operator of a control device subject to this section that installs an enclosed combustion device, such as a thermal vapor incinerator, catalytic vapor incinerator, boiler or process heater, shall meet subsection (b)(1)—(7) and the following:

(1) Ensure the enclosed combustion control device is designed and operated to meet one of the following performance requirements:

(i) To reduce the mass content of VOC in the gases vented to the device by 95.0% by weight or greater, as determined under subsection (k).

(ii) To reduce the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (l).

(iii) To operate at a minimum temperature of 760 °Celsius (1,400 °Fahrenheit), if it is demonstrated during the performance test conducted under subsection (k) that combustion zone temperature is an indicator of destruction efficiency.

(iv) To introduce the vent stream into the flame zone of the boiler or process heater if a boiler or process heater is used as the control device.

(2) Install, calibrate, operate and maintain a CPMS according to the manufacturer's specifications and subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:

**SECTION D. Source Level Requirements**

(i) For a thermal vapor incinerator that demonstrates under subsection (m)(6)(i) that combustion zone temperature is an accurate indicator of performance, a temperature CPMS that meets subsection (m)(1) and (4) with the temperature sensor installed at a location representative of the combustion zone temperature.

(ii) For a catalytic vapor incinerator, a temperature CPMS capable of monitoring temperature at two locations and that meets subsection (m)(1) and (4) with one temperature sensor installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(iii) For a boiler or process heater that demonstrates under subsection (m)(6)(i) that combustion zone temperature is an accurate indicator of performance, a temperature CPMS that meets subsection (m)(1) and (4) with the temperature sensor installed at a location representative of the combustion zone temperature. The monitoring requirements do not apply if the boiler or process heater meets either of the following:

(A) Has a design heat input capacity of 44 megawatts (150 MMBtu per hour) or greater.

(B) Introduces the vent stream with the primary fuel or uses the vent stream as the primary fuel.

(iv) For a control device complying with paragraph (1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control device.

(3) Operate the control device in compliance with the operating parameter value established under subsection (m)(6).

(4) Calculate the daily average of the monitored operating parameter for each operating day, using the valid data recorded by the monitoring system under subsection (m)(7).

(5) Ensure that the daily average of the monitoring parameter value calculated under paragraph (4) complies with the parameter value established under paragraph (3) as specified in subsection (m)(9).

(6) Operate the CPMS installed under paragraph (2) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).

(e) Compliance requirements for a flare. The owner or operator of a control device subject to this section that installs a flare designed and operated in accordance with 40 CFR 60.18(b) (relating to general control device and work practice requirements) shall meet subsection (b)(3)—(7).

(f) - (h) Not applicable.

(i) Compliance requirements for a condenser or non-destructive control device. The owner or operator of a control device subject to this section that installs a condenser or other non-destructive control device shall meet subsection (b)(1) and (2) and the following:

(1) Design and operate the condenser or other non-destructive control device to reduce the mass content of VOC in the gases vented to the device as demonstrated by one of the following:

(i) Determining the VOC emissions reduction is 95.0% by weight or greater under subsection (k).

(ii) Reducing the concentration of TOC in the exhaust gases at the outlet to the device to a level less than or equal to 275 ppmvd as propane corrected to 3% oxygen as determined under subsection (l).

(iii) Conducting a design analysis in accordance with paragraph (7).

(2) Prepare a site-specific monitoring plan that addresses the following CPMS design, data collection, and quality assurance and quality control elements:

(i) The performance criteria and design specifications for the CPMS equipment, including the following:

(A) The location of the sampling interface that allows the CPMS to provide representative measurements. For a temperature CPMS that meets the requirements of subsection (m)(1) and (4) the sensor must be installed in the exhaust vent stream as detailed in the procedures of the site-specific monitoring plan.

(B) Equipment performance checks, system accuracy audits or other audit procedures.

(I) Performance evaluations of each CPMS shall be conducted in accordance with the site-specific monitoring plan.

(II) CPMS performance checks, system accuracy audits or other audit procedures specified in the site-specific monitoring plan shall be conducted at least once every 12 months.

(ii) Ongoing operation and maintenance procedures in accordance with 40 CFR 60.13(b) (relating to monitoring requirements).

(iii) Ongoing reporting and recordkeeping procedures in accordance with 40 CFR 60.7(c), (d) and (f) (relating to notification and record keeping).

(3) Install, calibrate, operate and maintain a CPMS according to the site-specific monitoring plan described in paragraph (2) and the applicable requirements of subsection (m) to measure the values of the operating parameters appropriate to the control device as follows:

(i) For a source complying with paragraph (1)(i), a temperature CPMS that meets subsection (m)(1) and (4) to measure

**SECTION D. Source Level Requirements**

and record the average condenser outlet temperature.

(ii) For a source complying with paragraph (1)(ii), an organic concentration CPMS that meets subsection (m)(1) and (5) that measures the concentration level of organic compounds in the exhaust vent stream from the control device.

(4) Operate the control device in compliance with the operating parameter value established under subsection (m)(6).

(5) Calculate the daily average of the applicable monitored operating parameter for each operating day, using the valid data recorded by the CPMS as follows:

(i) For a source complying with paragraph (1)(i), use the calculated daily average condenser outlet temperature as specified in subsection (m)(7) and the condenser performance curve established under subsection (m)(6)(iii) to determine the condenser efficiency for the current operating day. Calculate the 365-day rolling average TOC emission reduction, as appropriate, from the condenser efficiencies as follows:

(A) If there is less than 120 days of data for determining average TOC emission reduction, calculate the average TOC emission reduction for the first 120 days of operation. Compliance is demonstrated with paragraph (1)(i) if the 120-day average TOC emission reduction is equal to or greater than 95.0% by weight.

(B) After 120 days and no more than 364 days of operation, calculate the average TOC emission reduction as the TOC emission reduction averaged over the number of days of operation for which there is data. Compliance is demonstrated with paragraph (1)(i) if the average TOC emission reduction is equal to or greater than 95.0% by weight.

(C) If there is data for 365 days or more of operation, compliance is demonstrated with the TOC emission reduction if the rolling 365-day average TOC emission reduction calculated in subparagraph (i) is equal to or greater than 95.0% by weight.

(ii) For a source complying with paragraph (1)(ii), calculate the daily average concentration for each operating day, using the data recorded by the CPMS as specified in subsection (m)(7). Compliance is demonstrated with paragraph (1)(ii) if the daily average concentration is less than the operating parameter under paragraph (4) as specified in subsection (m)(9).

(6) Operate the CPMS installed in accordance with paragraph (3) whenever the source is operating, except during the times specified in subsection (m)(8)(iii).

(7) Ensure that the design analysis to meet paragraph (1)(iii) for a condenser or other non-destructive control device meets the following:

(i) Includes an analysis of the vent stream including the following information:

(A) Composition.

(B) Constituent concentrations.

(C) Flowrate.

(D) Relative humidity.

(E) Temperature.

(ii) Establishes the following parameters for the condenser or other non-destructive control device:

(A) Design outlet organic compound concentration level.

(B) Design average temperature of the condenser exhaust vent stream.

(C) Design average temperatures of the coolant fluid at the condenser inlet and outlet.

(j) General performance test requirements. The owner or operator shall meet the following performance test requirements:

(1) The owner or operator shall do the following, as applicable:

(i) Except as specified in subparagraph (iii), conduct an initial performance test within 180 days after installation of a control device.

(ii) Except as specified in subparagraph (iii), conduct a performance test of an existing control device on or before July 30, 2023, unless the owner or operator of the control device is complying with an established performance test interval, in which case the current schedule should be maintained.

(iii) The performance test in subparagraph (i) or subparagraph (ii) is not required if the owner or operator meets one or more of the following:

(A) Installs a manufacturer-tested combustion device that meets the requirements of subsection (c).

(B) Installs a flare that meets the requirements of subsection (e).

(C) Installs a boiler or process heater with a design heat input capacity of 44 megawatts (150 MMBtu per hour) or greater.

(D) Installs a boiler or process heater which introduces the vent stream with the primary fuel or uses the vent stream as the primary fuel.

(E) Installs a boiler or process heater which burns hazardous waste that meets one or more of the following:

(I) For which an operating permit was issued under 40 CFR Part 270 (relating to EPA administered permit programs: the hazardous waste permit program) and complies with the requirements of 40 CFR Part 266, Subpart H.

(II) For which compliance with the interim status requirements of 40 CFR Part 266, Subpart H has been certified.

**SECTION D. Source Level Requirements**

- (III) Which complies with 40 CFR Part 63, Subpart EEE and for which a Notification of Compliance under 40 CFR 63.1207(j) was submitted to the Department.
- (IV) Which complies with 40 CFR Part 63, Subpart EEE and for which a Notification of Compliance under 40 CFR 63.1207(j) will be submitted to the Department within 90 days of the completion of the initial performance test report unless a written request for an extension is submitted to the Department.
- (F) Installs a hazardous waste incinerator which meets the requirements of 40 CFR Part 63, Subpart EEE and for which the Notification of Compliance under 40 CFR 63.1207(j):
- (I) Was submitted to the Department.
  - (II) Will be submitted to the Department within 90 days of the completion of the initial performance test report unless a written request for an extension is submitted to the Department.
- (G) Requests the performance test be waived under 40 CFR 60.8(b) (relating to performance tests).
- (2) Conduct a periodic performance test no more than 60 months after the most recent performance test unless the owner or operator:
- (i) Monitors the inlet gas flow for a manufacturer-tested combustion device under subsection (c)(1)(i).
  - (ii) Installs a control device exempt from testing requirements under paragraph (1)(iii)(A)—(G).
  - (iii) Establishes a correlation between firebox or combustion chamber temperature and the VOC performance level for an enclosed combustion device under subsection (d)(2)(iii).
- (3) Conduct a performance test when establishing a new operating limit.
- (k) - (m) Not applicable.

**VII. ADDITIONAL REQUIREMENTS.****# 012 [25 Pa. Code §129.131]****General provisions and applicability**

(a) Applicability. Beginning December 2, 2022, this section and § § 129.132—129.140 (relating to control of VOC emissions from conventional oil and natural gas sources) apply to an owner or operator of one or more of the following conventional oil and natural gas sources of VOC emissions installed at a conventional well site, a gathering and boosting station or a natural gas processing plant in this Commonwealth which were constructed on or before December 2, 2022:

- (1) Storage vessels at:
- (i) - (ii) [Do not apply]
  - (iii) A natural gas processing plant.
- (2) - (3) [Do not apply]
- (4) Reciprocating compressors and centrifugal compressors.
- (5) Fugitive emissions components.

(b) [Does not apply]

**# 013 [25 Pa. Code §129.132]****Definitions, acronyms and EPA methods**

[For a full list of definitions, refer to 25 Pa. Code § 129.132]

Leak—An emission detected using one or more of the following methods:

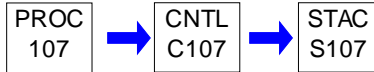
- (i) Through audible, visual or odorous evidence during an AVO inspection.
- (ii) By OGI equipment calibrated according to § 129.137(h).
- (iii) With a concentration of 500 ppm or greater as methane or equivalent by a gas leak detector calibrated according to § 129.137(i).
- (iv) Using an alternative leak detection method approved by the Department in § 129.137(c)(2)(ii)(C), (c)(3)(ii)(C) or (e)(2)(iii).

**SECTION D. Source Level Requirements**

Source ID: 107

Source Name: CONDENSATE TANKS (2)

Source Capacity/Throughput:

**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).**

# 001 [25 Pa. Code §127.12b]

**Plan approval terms and conditions.**

In accordance with 25 Pa. Code §§ 127.1 and 127.12(a)(5), the owner or operator of condensate tank or other storage vessel shall install and operate VOC control equipment that has a control efficiency of at least 95% on a storage vessel that has actual uncontrolled VOC emissions of greater than or equal to two tons per year. The owner or operator may use any of the following or any other method approved by the Department for calculating VOC emissions from condensate tank or other storage vessel.

- i. Vasquez-Beggs Equation (VBE)
- ii. Environmental Consultants and Research, Inc. (EC/R) Equation
- iii. An equation of state (EOS) calculation program such as E&P Tank®
- iv. Determination of the gas oil ratio (GOR) and throughput of the hydrocarbon liquids
- v. Process simulators (HYSIM®, HYSYS®, WINSIM®, PROSIM®, etc.)
- vi. Direct measurement of emissions

[PA 10-359D]

**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 §127.12b]

**Plan approval terms and conditions.**

(a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, and any routine maintenance performed.

(b) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

[PA 10-359D]

**V. REPORTING REQUIREMENTS.**

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



**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[PA 10-359D]

**# 004 [25 Pa. Code §129.57]****Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

The provisions of this section shall apply to above ground stationary storage tanks with a capacity equal to or greater than 2,000 gallons which contain volatile organic compounds with vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions. Storage tanks covered under this section shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than .7 psig (4.8 kilopascals) of pressure or .3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department. Section 129.56(g) (relating to storage tanks greater than 40,000 gallons capacity containing volatile organic compounds) applies to this section. Petroleum liquid storage vessels which are used to store produced crude oil and condensate prior to lease custody transfer shall be exempt from the requirements of this section.

**VII. ADDITIONAL REQUIREMENTS.**

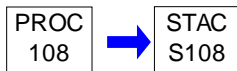
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION D. Source Level Requirements**

Source ID: 108

Source Name: PROCESS HEATERS

Source Capacity/Throughput: 1,960.000 CF/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess 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.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO<sub>2</sub>, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input.

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

(a) The permittee shall maintain a record of all preventive maintenance inspections of this source. These records shall at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) All required records shall be maintained for a minimum five (5) years, and shall be made available to Department personnel upon request.

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

The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.



## SECTION D. Source Level Requirements

### VII. ADDITIONAL REQUIREMENTS.

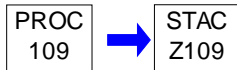
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION D. Source Level Requirements**

Source ID: 109

Source Name: TRUCK LOADING FUGITIVES

Source Capacity/Throughput:

**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.**

(a) The permittee shall maintain a record of all preventive maintenance inspections of this source. These records shall at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) All required records shall be maintained for a minimum five (5) years, and shall be made available to Department personnel upon request.

**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 permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

**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: INLET &amp; RESIDUE COMPRESSORS

Group Description: PA 10-359D &amp; § 60 Subpart JJJJ Requirements

Sources included in this group

ID	Name
101A	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700714
101B	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700679
101C	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700665
101D	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700974
102A	1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN C-18626/1
102B	1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN C-18625/
102C	1480 BHP WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN 5283701028

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.13]****Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

**# 002 [25 Pa. Code §123.21]****General**

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 SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Emissions from these engines shall not exceed the following:

NO<sub>x</sub>: 0.3 g/BHP-hr (per engine)  
 CO: 0.65 g/BHP-hr (per engine)  
 VOC: 0.25 g/BHP/hr (per engine)

[PA 10-359D]

**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Formaldehyde emissions from these engines shall not exceed 0.2272 lb/hr, per engine.

[PA 10-359D]

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

(a) - (d) [Not applicable]

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

**SECTION E. Source Group Restrictions.**

(f) - (h) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?**

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

**II. TESTING REQUIREMENTS.****# 007 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) Within sixty (60) days after achieving the rated brake horsepower, but no later than one hundred eighty (180) days after initial start-up of each engine, the permittee shall perform stack testing on each compressor engine for NO<sub>x</sub>, CO, Non-Methane Hydrocarbon (NMHC), and Formaldehyde (HCHO). Engine testing load conditions shall be representative to within 10% of maximum load design capacity or to within 10% of the maximum permitted operating load as proposed by the applicant.
- (b) In addition to the stack testing required by this condition, within 12 months after the initial stack testing, and annually thereafter, the owner or operator shall perform NO<sub>x</sub> and CO emissions tests upon each engine using a portable analyzer approved by the Department. The Department may alter the frequency of annual portable analyzer tests based on the results. The Department may also waive all or parts of this requirement if the owner or operator demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department.
- (c) The Department reserves the right to require stack tests in accordance with EPA reference methods should the data from the portable analyzer warrant such tests. The purpose of this testing is to demonstrate compliance with the emission limitations required for new engines.
- (d) If performance stack tests are required for the demonstration of compliance with applicable emissions limits, the owner or operator of the affected facility shall comply with the following requirements:
- (A) Within sixty (60) days after achieving the rated brake horsepower, but no later than one hundred eighty (180) days after the initial startup of the SI ICE, the owner or operator shall demonstrate compliance with the applicable emission limits. [This condition is a one-time requirement]
- (B) At least ninety (90) calendar days prior to commencing an emission testing program required, a test protocol shall be submitted to the Department for review and approval in accordance with paragraph (d)(J) of this condition. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- (C) At least fifteen (15) calendar days prior to commencing an emission testing program required, notification of the date and time of testing shall be provided to the Department in accordance with paragraph (d)(J)(2) of this condition. The Department is under no obligation to accept the results of any testing performed without adequate advance notice to the Department of such testing.
- (D) Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program required, if a complete test report has not yet been submitted, an electronic mail notification indicating the completion date of the on-site testing shall be sent to the Department in accordance with paragraph (d)(J)(2) of this condition.
- (E) A complete test report shall be submitted to the Department no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program required.
- (F) A complete 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

**SECTION E. Source Group Restrictions.**

conditions. The summary results will include, at a minimum, the following information:

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

(G) All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(H) All testing shall be performed in accordance with any applicable federal regulations (such as New Source performance Standards, Subpart I); 25 Pa. Code, Chapter 139; and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The following federal reference methods or alternative test method as approved by the Department shall be used to demonstrate compliance:

- 40 CFR 60, Appendix A, Method 7E shall be used to determine the NO<sub>x</sub> emissions.
- 40 CFR 60, Appendix A, Method 10 shall be used to determine the CO emissions.
- 40 CFR 60, Appendix A, Method 18 shall be used to determine the NMHC emissions.
- 40 CFR Part 63 Appendix A, Method 320 shall be used to determine the HCHO emissions.

(I) The owner/operator shall ensure that the stack height is in accordance with Good Engineering Practice (GEP) as established in EPA's 40 CFR §51.1(ii). Good Engineering Practice (GEP) stack height is defined as the greater of:

- (1) 65 meters, measured from the ground-level elevation at the base of the stack;

(2) for stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required under 40 CFR 51 and 52, provided the owner or operator produces evidence that this equation was actually relied on in designing the stack or establishing an emission limitation to ensure protection against downwash;

$$Hg = 2.5H$$

- (3) for all other stacks;

$$Hg = H + 1.5L$$

where:

Hg = good engineering practice stack height, measured from the ground-level elevation at the base of the stack.

H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack.

L = lesser dimension, height or projected width, of nearby structure(s); or

(4) The height demonstrated by a fluid model or a field study approved by the EPA, state or local control agency, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant (see 40 CFR 51.1) as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structure or nearby terrain features.

The Department reserves the right to revise the stack height in accordance with the GEP to ensure that emissions of Hazardous Air Pollutants (HAPs) met ambient air quality standards.

(J) For source test submittals:

(1) All submittals, besides notifications, shall be accomplished through PSIMS\*Online, available through <https://greenport.pa.gov/gpl/GPLLogin/Login>

(2) If internet submittal cannot be accomplished, one electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) shall be sent to both PSIMS Administration in Central Office and to

**SECTION E. Source Group Restrictions.**

Regional Office AQ Program Manager.

Electronic copies shall be sent at the following e-mail addresses:

CENTRAL OFFICE:

RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE:

RA-EPNWstacktesting@pa.gov

(K) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the permittee shall comply with the most stringent provision, term, condition, method or rule.

(L) If, at any time, the Department has reason to believe that the air contaminant emissions from the exhaust of SI ICE(s) operating under this operating permit are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct stack tests as are deemed necessary by the Department to determine the actual air contaminant emission rate. The owner or operator shall perform any such testing in accordance with the applicable provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

(M) Between May 1st and September 30th, any testing and or/tuning of a SI ICE shall be performed between 5:00pm and 11:00pm.

(N) The owner or operator of a SI ICE located in the regions for which the daily Air Quality Index (AQI) and AQI forecast is available shall not perform any testing and/or tuning on days that the AQI is forecast to be higher than 100 for either Ozone or PM2.5. The owner or operator may check or obtain by e-mail daily AQI and AQI forecast by registering at <http://www.aqpartners.org>.

[PA 10-359D. Paragraphs (d)(B), (d)(C), (d)(D), & (d)(J) are revised to reflect Source Testing Section's latest instructions, dated August 17, 2018, on source test submittals.]

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]  
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines  
What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?**

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

[Refer to § 60.4243, under VI. Work Practice Requirements for this source group, for the frequency of subsequent performance tests]

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

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

(d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the



**SECTION E. Source Group Restrictions.**

engine exhaust using Equation 1 of this section:

(Equation 1 omitted...refer to regulation for exact formula notation).

Where:

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

Cd = Measured NOX concentration in parts per million by volume (ppmv).

$1.912 \times 10^{-3}$  = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

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

(Equation 2 omitted...refer to regulation for exact formula notation).

Where:

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

Cd = Measured CO concentration in ppmv.

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

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

T = Time of test run, in hours.

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

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

(Equation 3 omitted...refer to regulation for exact formula notation).

Where:

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

Cd = VOC concentration measured as propane in ppmv.

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

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

T = Time of test run, in hours.

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

**SECTION E. Source Group Restrictions.**

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

(Equation 4 omitted...refer to regulation for exact formula notation).

Where:

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

$CM_i$  = Measured concentration of compound i in ppmv as carbon.

$CA_i$  = True concentration of compound i in ppmv as carbon.

(Equation 5 omitted...refer to regulation for exact formula notation).

Where:

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

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

(Equation 6 omitted...refer to regulation for exact formula notation).

Where:

$CP_{eq}$  = Concentration of compound i in mg of propane equivalent per DSCM.

**III. MONITORING REQUIREMENTS.****# 009 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The facility shall follow manufacturer's recommended as to the temperature and pressure change needed across the NSCR to ensure proper performance. The owner or operator shall measure inlet temperature, outlet temperature, inlet pressure, and outlet pressure at least once a month for each source and indicate along with the manufacturer's values or range of values for immediate reference.

(b) The facility shall monitor at least once per week the air/fuel ratio controller set point for each source.

[PA 10-359D]

**IV. RECORDKEEPING REQUIREMENTS.****# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall maintain a record of all preventative maintenance inspections of these source(s). These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

(b) The permittee shall maintain monthly records of the amount of fuel combusted and hours of operation for each engine.

(c) All required records shall be maintained for a minimum of five (5) years, and shall be made available to Department personnel upon request.

**SECTION E. Source Group Restrictions.**

[PA 10-359D]

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

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

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) [Not applicable]

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section. Beginning on February 26, 2025 submit the notification electronically according to paragraph (g) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. Beginning on February 26, 2025, performance tests must be reported electronically according to paragraph (f) of this section.

(e) [Not applicable]

(f) Beginning on February 26, 2025, within 60 days after the date of completing each performance test, you must submit the results following the procedures specified in paragraph (g) of this section. Data collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or an alternate electronic file.

(g) If you are required to submit notifications or reports following the procedure specified in this paragraph (g), you must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit a complete file in the format specified in this subpart, including

**SECTION E. Source Group Restrictions.**

information claimed to be CBI, to the EPA following the procedures in paragraphs (g)(1) and (2) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this paragraph (g).

(1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described in paragraph (g) of this section, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link.

(2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(h) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (h)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(i) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (i)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

**SECTION E. Source Group Restrictions.**

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and (iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(j) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016; 86 FR 34362, June 29, 2021; 87 FR 48606, Aug. 10, 2022; 89 FR 70514, Aug. 30, 2024]

**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.****# 012 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall install, maintain, and operate an appropriately designed air-to-fuel ratio controller on each engine.

(b) The permittee shall install, maintain, and operate these source(s) and control device(s) in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[PA 10-359D]

**# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

(a) [Not applicable]

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) [Not applicable]

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

(c) - (f) [Not applicable]

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

**SECTION E. Source Group Restrictions.**

(h) - (i) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

**VII. ADDITIONAL REQUIREMENTS.**

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248]  
Subpart JJJJ - Standards of Performance for Stationary Spark 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.

[For a complete list of the definitions in this subpart, please refer to the Code of Federal Regulations (eCFR) website:  
<https://www.ecfr.gov/current/title-40/section-60.4248>]

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013; 86 FR 34363, June 29, 2021; 87 FR 48606, Aug. 10, 2022]

**SECTION E. Source Group Restrictions.**

Group Name: REFRIGERANT COMPRESSOR

Group Description: GP5-10-359C &amp; § 60 Subpart JJJJ Requirements

Sources included in this group

ID	Name
103A	REFRIGERANT CMPRSSR, 840 BHP, WAKESHA F3524GSI, SN C-17098/B

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.13]****Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

**# 002 [25 Pa. Code §123.21]****General**

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 SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

**# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Visible emissions from the engine shall not exceed either of the following limitations:

- (a) Equal to or greater than 10 percent for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
- (b) Equal to or greater than 30 percent at any time.

[GP-5 (Rev. Feb. 2013), Section B, Condition #02(c)]

**# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The emission limitations in Conditions #001 & #002 shall apply at all times except during periods of start-up and shutdown provided that the duration of start-up and shutdown does not exceed 30 minutes per occurrence.

[GP-5 (Rev. Feb. 2013), Section B, Condition #03]

**# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Emissions from this engine shall not exceed the following:

- (a) NO<sub>x</sub>: 0.20 g/BHP-hr (per engine)
- (b) CO: 0.35 g/BHP-hr (per engine)
- (c) NMNEHC as propane, excluding HCHO: 0.20 g/BHP/hr (per engine)
- (d) Formaldehyde (HCHO): 2.7 ppmvd at 15% oxygen, or 76% reduction

[GP-5 (Rev. Feb. 2013), Section B, Condition #02(a). Compliance with these emission limits assures compliance with applicable emission limits under § 60 Subpart JJJJ.]

**SECTION E. Source Group Restrictions.****# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

(a) - (d) [Not applicable]

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

(f) - (h) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?**

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

**II. TESTING REQUIREMENTS.****# 008 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The owner or operator shall comply with the following:

(a) Within one hundred eighty (180) days after the initial startup of the engine, the owner or operator shall demonstrate compliance with applicable emission limits and furnish the Department a written report of the result of such performance test.

(1) Stack test to be performed for NO<sub>x</sub>, CO, HCHO, NMHC or NMNEHC.

(2) Engine testing load conditions shall be representative to within 10 percent of 100% peak or the highest achievable load.

(b) At least ninety (90) calendar days prior to commencing an emission testing program to demonstrate compliance with applicable emission limits, a test protocol shall be submitted to the Department for review and approval in accordance with paragraph (i) of this condition. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.

(c) At least fifteen (15) calendar days prior to commencing an emission testing program to demonstrate compliance with applicable emission limits, notification of the date and time of testing shall be provided to the Department in accordance with paragraph (i)(2) of this condition. The Department is under no obligation to accept the results of any testing performed without adequate advance notice to the Department of such testing.

(d) Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program to demonstrate compliance with applicable emission limits, if a complete test report has not yet been submitted, an electronic e-mail notification indicating the completion date of the on-site testing shall be sent to the Department in accordance with paragraph (i)(2) of this condition.

(e) A complete test report shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office no later than sixty (60) calendar days after completion of the on-site testing portion of an



**SECTION E. Source Group Restrictions.**

emission test program required.

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

- (i) A statement that the owner or operator has reviewed the report from the emissions testing company and agrees with the findings;
- (ii) Permit number(s) and condition(s) that are the basis for the evaluation;
- (iii) Summary of results with respect to each applicable permit condition; and
- (iv) Statement of compliance or non-compliance with each applicable permit condition.

(g) All submittals with the exception of periodic monitoring data shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(h) All testing with the exception of periodic monitoring shall be performed in accordance with any applicable federal regulations (such as New Source Performance Standards), 25 Pa. Code, Chapter 139, and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The owner or operator of the facility shall use the following federal reference methods or alternative test methods approved, in writing, by the Department to demonstrate compliance:

40 CFR Part 60, Appendix A, Method 5 and EPA Test Method 202 shall be used to determine the total particulate matter emissions.

40 CFR Part 60, Appendix A, Method 7E shall be used to determine the nitrogen oxide (NO<sub>x</sub>) emissions.

40 CFR Part 60, Appendix A, Method 10 shall be used to determine the carbon monoxide (CO) emissions.

40 CFR Part 60 Methods 25A and 18 or 40 CFR Part 60 Method 25A and 40 CFR Part 63 Method 320 shall be used to determine the non-methane non-ethane hydrocarbons (NMNEHC) emissions.

40 CFR Part 63, Appendix A, Method 320 or Method 328 shall be used to determine the formaldehyde (HCHO) emissions.

(i) For reports, protocols and test completion notification with the exception of periodic monitoring data:

(1) All submittals, besides notifications, shall be accomplished through PSIMS\*Online, available through <https://greenport.pa.gov/gpl/GPLLogin/Login>

(2) If internet submittal cannot be accomplished, one electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) shall be sent to both PSIMS Administration in Central Office and to Regional Office AQ Program Manager.

Electronic copies shall be sent at the following e-mail addresses:

CENTRAL OFFICE:

RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE:

RA-EPNWstacktesting@pa.gov

(j) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the owner or operator shall comply with the most stringent provision, term, condition, method or rule.

**SECTION E. Source Group Restrictions.**

(k) If, at any time, the Department has notified the owner or operator that the air contaminant emissions from the source are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct source tests deemed necessary by the Department to determine the actual air contaminant emission rate. The testing shall be conducted in accordance with the applicable provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

[GP-5 (Rev. Feb. 2013), Section A, Condition #22 & Section B, Condition #04(b). Paragraphs (b), (c), (d), & (i) are revised to reflect Source Testing Section's latest instructions, dated August 17, 2018, on source submittals.]

[The initial stack test (paragraph (a) of this condition) is a one-time requirement. The rest of this condition apply when performing subsequent stack tests - i.e., performance tests pursuant to § 60 Subpart JJJJ.]

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]**

**Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

**What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?**

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

[Refer to § 60.4243, under VI. Work Practice Requirements for this source group, for the frequency of subsequent performance tests]

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

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

(d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

(Equation 1 omitted...refer to regulation for exact formula notation).

Where:

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

Cd = Measured NOX concentration in parts per million by volume (ppmv).

$1.912 \times 10^{-3}$  = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

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

(Equation 2 omitted...refer to regulation for exact formula notation).

**SECTION E. Source Group Restrictions.**

Where:

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

Cd = Measured CO concentration in ppmv.

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

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

T = Time of test run, in hours.

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

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

(Equation 3 omitted...refer to regulation for exact formula notation).

Where:

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

Cd = VOC concentration measured as propane in ppmv.

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

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

T = Time of test run, in hours.

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

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

(Equation 4 omitted...refer to regulation for exact formula notation).

Where:

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

CMi = Measured concentration of compound i in ppmv as carbon.

CAi = True concentration of compound i in ppmv as carbon.

(Equation 5 omitted...refer to regulation for exact formula notation).

Where:

C icorr = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv

**SECTION E. Source Group Restrictions.**

as carbon.

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

(Equation 6 omitted...refer to regulation for exact formula notation).

Where:

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

**III. MONITORING REQUIREMENTS.****# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) Every 2,500 hours of operation and no sooner than forty-five (45) days from the previous test, the owner or operator shall perform periodic monitoring for NO<sub>x</sub> and CO emissions to verify continued compliance upon each of the respective engines which has a rated capacity greater than 500 bhp and subject to the BAT, as specified in Conditions #001 & #002 for this source. A Department-approved test that has been performed within 45 days prior to the scheduled periodic monitoring may be used in lieu of the period monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three test runs of twenty (20) minutes for each test run. The Department may alter the frequency of portable analyzer tests based on test results. The frequency of portable gas analyzer tests may be altered with written Departmental approval. The portable gas analyzer shall be used and maintained according to the manufacturer's specifications and the procedures specified in ASTM D 6522 or equivalent as approved by the Department.

(b) Within thirty (30) calendar days after the completion of periodic monitoring, the owner or operator shall submit the results to the appropriate DEP Regional Office. The Department reserves the right to require source tests in accordance with EPA reference methods should the data from the portable analyzer warrant such tests.

[GP-5 (Rev. Feb. 2013), Section B, Condition #04(c) & (d)]

**IV. RECORDKEEPING REQUIREMENTS.****# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The owner or operator shall maintain comprehensive accurate records of the following:

- (1) number of hours per month that each engine operated using a non-resettable hour meter, and
- (2) the amount of each fuel type that is used per month in each engine.

(b) The records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

[GP-5 (Rev. Feb. 2013), Section B, Condition #05(b) & Condition #06(c)]

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.

**SECTION E. Source Group Restrictions.**

- (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060 , as applicable.
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2) , documentation that the engine meets the emission standards.
- (b) [Not applicable]
- (c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.
- (d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
- (e) [Not applicable]
- [73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016]

**V. REPORTING REQUIREMENTS.****# 013 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction for this source or its pollution control equipment, which results in, or may possibly resulting in, the emission of air contaminants in excess of applicable limitations. Following the telephone notification, a written notice also be submitted to the Department as specified below.

- (a) If the owner or operator is unable to provide notification by telephone to the appropriate Regional Office within twenty-four (24) hours of discovery of a malfunction due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first business day for the Department following the weekend or holiday.
- (b) Any malfunction that poses an imminent danger to the public health, safety, welfare, or environment shall be reported by telephone to the Department and the County Emergency Management Agency immediately after the discovery of an incident. The owner or operator shall submit a written report of instances of such malfunctions to the Department within three (3) business days of the telephone report.
- (c) Any other malfunctions shall be reported to the Department, in writing, within five (5) business days of malfunction discovery.

[GP-5 (Rev. Feb. 2013), Section A, Condition #11(e)]

**SECTION E. Source Group Restrictions.****# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

Emissions from start-up and shutdown shall be included in annual emissions inventory reported for this engine pursuant to 25 Pa Code §§ 135.3, 135.4 and 135.5, incorporated in Section C of this operating permit.

[GP-5 (Rev. Feb. 2013), Section B, Condition #03]

**VI. WORK PRACTICE REQUIREMENTS.****# 015 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The owner or operator shall install, maintain, and operate the engine and associated air pollution control equipment in accordance with manufacturer's specifications and in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of start-up and shutdown.

[GP-5 (Rev. Feb. 2013), Section B, Condition #03 & #05(a)]

**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The engine must be equipped with non-resettable hour meter.

**# 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

(a) [Not applicable]

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) [Not applicable]

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

(c) - (f) [Not applicable]

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

(h) - (i) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

**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: § 63 SUBPART HH

Group Description: NESHAP from oil &amp; natural gas production facilities

**Sources included in this group**

ID	Name
104	DEHYDRATOR/REBOILER

**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.****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.764]****Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities General standards.**

(a) Table 2 of this subpart specifies the provisions of subpart A (General Provisions) of this part that apply and those that do not apply to owners and operators of affected sources subject to this subpart.

(b) All reports required under this subpart shall be sent to the Administrator at the appropriate address listed in § 63.13. Reports may be submitted on electronic media.

(c) [Omitted. For major sources of HAP emissions.]

(d) Except as specified in paragraph (e)(1) of this section, the owner or operator of an affected source located at an existing or new area source of HAP emissions shall comply with the applicable standards specified in paragraph (d) of this section.

(1) Each owner or operator of an area source located within an UA plus offset and UC boundary (as defined in § 63.761) shall comply with the provisions specified in paragraphs (d)(1)(i) through (iii) of this section.

(i) The control requirements for glycol dehydration unit process vents specified in § 63.765;

(ii) The monitoring requirements specified in § 63.773; and

(iii) The recordkeeping and reporting requirements specified in §§ 63.774 and 63.775.

(2) Each owner or operator of an area source not located in a UA plus offset and UC boundary (as defined in § 63.761) shall comply with paragraphs (d)(2)(i) through (iii) of this section.

(i) Determine the optimum glycol circulation rate using the following equation:

**SECTION E. Source Group Restrictions.**

[Equation omitted. Refer to regulation for exact formula notation.]

Where:

LOPT = Optimal circulation rate, gal/hr.

F = Gas flowrate (MMSCF/D).

I = Inlet water content (lb/MMSCF).

O = Outlet water content (lb/MMSCF).

3.0 = The industry accepted rule of thumb for a TEG-to water ratio (gal TEG/lb H<sub>2</sub>O).

1.15 = Adjustment factor included for a margin of safety.

(ii) Operate the TEG dehydration unit such that the actual glycol circulation rate does not exceed the optimum glycol circulation rate determined in accordance with paragraph (d)(2)(i) of this section. If the TEG dehydration unit is unable to meet the sales gas specification for moisture content using the glycol circulation rate determined in accordance with paragraph (d)(2)(i), the owner or operator must calculate an alternate circulation rate using GRI-GLYCalc™, Version 3.0 or higher. The owner or operator must document why the TEG dehydration unit must be operated using the alternate circulation rate and submit this documentation with the initial notification in accordance with § 63.775(c)(7).

(iii) Maintain a record of the determination specified in paragraph (d)(2)(ii) in accordance with the requirements in § 63.774(f) and submit the Initial Notification in accordance with the requirements in § 63.775(c)(7). If operating conditions change and a modification to the optimum glycol circulation rate is required, the owner or operator shall prepare a new determination in accordance with paragraph (d)(2)(i) or (ii) of this section and submit the information specified under § 63.775(c)(7)(ii) through (v).

(e) Exemptions.

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

(i) The actual annual average flowrate of natural gas to the glycol dehydration unit is less than 85 thousand standard cubic meters per day, as determined by the procedures specified in § 63.772(b)(1) of this subpart; or

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

(2) The owner or operator is exempt from the requirements of paragraph (c)(3) of this section for ancillary equipment (as defined in § 63.761) and compressors at a natural gas processing plant subject to this subpart if the criteria listed in paragraph (e)(2)(i) or (ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in § 63.774(d)(2).

(i) Any ancillary equipment and compressors that contain or contact a fluid (liquid or gas) must have a total VHAP concentration less than 10 percent by weight, as determined by the procedures specified in § 63.772(a); or

(ii) That ancillary equipment and compressors must operate in VHAP service less than 300 hours per calendar year.

(f) [Omitted. For major sources of HAP emissions.]

(g) - (h) [Reserved]

(i) In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this standard to fail to take action to repair the leak(s) within the specified time. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of this standard. However, if the repairs are unsuccessful, and a leak is detected, the owner or operator shall take further action as required by the applicable provisions of this subpart.

(j) At all times the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[64 FR 32628, June 17, 1999, as amended at 66 FR 34551, June 29, 2001; 72 FR 38, Jan. 3, 2007; 77 FR 49570, Aug. 16, 2012]





**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
101A	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700714		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC
101B	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700679		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC
101C	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700665		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC
101D	1480 BHP, WAUKESHA L7042GSI, INLET COMPRESSOR, SN 5283700974		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC
102A	1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN C-18626/1		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
102B	1480 BHP, WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN C-18625/		
<b>Emission Limit</b>			
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC
102C	1480 BHP WAUKESHA L7042GSI, RESIDUE COMPRESSOR, SN 5283701028		
<b>Emission Limit</b>			
0.650	GRAMS/HP-Hr	(per engine)	CO
0.227	Lbs/Hr	(per engine)	Formaldehyde
0.300	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.250	GRAMS/HP-Hr	(per engine)	VOC
103A	REFRIGERANT COMPRESSOR, 840 BHP, WAKESHA F3524GSI, SN C-17098/B		
<b>Emission Limit</b>			
0.350	GRAMS/HP-Hr	(per engine)	CO
2.700	PPMV/Hr	(dry basis, at 15% oxygen, OR 76% reduction)	Formaldehyde
0.200	GRAMS/HP-Hr	(per engine)	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.200	GRAMS/HP-Hr	(NMNEHC) (per engine)	VOC
104	DEHYDRATOR/REBOILER		
<b>Emission Limit</b>			
4.000	Lbs/MMBTU	of heat input.	SOX
0.400	Lbs/MMBTU	heat input	TSP
4.200	Tons/Yr	12-month rolling total	VOC
106	GAS PROCESSING PLANT VENTING		
<b>Emission Limit</b>			
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP

**Site Emission Restriction Summary**

Emission Limit	Pollutant
----------------	-----------



**SECTION G. Emission Restriction Summary.**

**SECTION H. Miscellaneous.**

- (a) The Capacity/Throughput numbers listed in Section A, the Site Inventory List, and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable emission limits and other enforceable restrictions are listed in the Restriction section for each source in Section D. The emission limitation contained in Section G (Emission Restriction Summary) of this permit are also for informational purposes only and are not to be considered enforceable limits.
- (b) Emissions
- (b.1) CO - Carbon monoxide
  - (b.1) NO<sub>x</sub> - Nitrogen oxides
  - (b.3) NMNEHC - Non-methane, non-ethane hydrocarbons
  - (b.4) HCHO - Formaldehyde
- (c) Source Information
- (c.1) Source ID #108: Process Heaters comprised of: (a) Molecular Sieve Heater and, (b) Hot Oil Heater.
- (d) Insignificant Source
- The following sources are insignificant and no requirements apply:
- (d.1) 3 pressurized tanks numbered 9401, 9402, 9403
    - Two (2) propane tanks, One (1) BG mixture
    - Contents - either propane or BG mix (butane gas mix); Tank capacity - 78,000 gallons; Overall tank length - (99' 6"); Tank diameters - (11' 11"), (11' 11 1/4"), & (11' 11 3/8"); Maximum allowable working pressure (MAWP) - 275 psi at 650°F; Operating pressure range - 10-150 psi for BG tanks, and 80-150 psi for propane tanks.
  - (d.2) Pigging Equipment (Source ID 801): VOC emissions are less than 1 TPY
  - (d.3) Methanol Tanks (Source ID 301): VOC emissions are less than 1 TPY
- (e) Federal rules not applicable to Sarsen Gas Processing Plant (SGP)
- As determined in PA 10-359B application (received December 11, 2009) & during the February 2019 operating permit renewal process.
- § 60 Subpart IIII. NSPS for stationary compression ignition internal combustion engines. No longer applicable because the diesel-fired emergency generator has been removed from the facility.
  - § 60 Subparts K/Ka/Kb. NSPS for storage vessels for petroleum liquids. The condensate tanks at SGP do meet the applicability storage capacity criteria of these rules.
  - § 60 Subpart LLL. NSPS for SO<sub>2</sub> emissions from onshore natural gas processing. SGPSGP does not operate a sweetening unit because the field gas it processes does not contain sufficient sulfur compounds (e.g., hydrogen sulfide).
  - § 63 Subpart HHH. NESHAP for natural gas transmission & storage facilities. Not applicable because SGP is not a major HAP source.
  - § 63 Subpart DDDDD. NESHAP for industrial, commercial, and institutional boilers & process heaters at major HAP sources. SGP is not a major HAP source.
- (f) Permit History
- (f.1) The initial operating permit was issued on December 3, 2013.
  - (f.2) The permit was renewed on the following dates: February 12, 2019.
  - (f.3) The permit was modified at the request of the facility on February 26, 2020. The modification replaced the LDAR from Subparts KKK and VV with the more stringent requirements of OOOO.
  - (f.4) This permit was administratively amended on January 17, 2023 to incorporate the change in responsible official and permit contact as well as the mailing address.
  - (f.5) This permit was renewed on December 4, 2024 with an expiration date of November 30, 2029.



\*\*\*\*\* End of Report \*\*\*\*\*

---