



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

### STATE ONLY SYNTHETIC MINOR OPERATING PERMIT

Issue Date: March 25, 2025 Effective Date: April 8, 2025

Expiration Date: March 25, 2030

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

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

### State Only Permit No: 63-00999

Synthetic Minor

Federal Tax Id - Plant Code: 32-0422322-14

**Owner Information** 

Name: EQM GATHERING OPCO LLC

Mailing Address: 2200 ENERGY DR

CANONSBURG, PA 15317-1001

Plant Information

Plant: EQM GATHERING OPCO LLC/BLUE MOON COMP STA

Location: 63 Washington County 63966 West Pike Run Township

SIC Code: 4922 Trans. & Utilities - Natural Gas Transmission

Operator

Name: KEVIN LEWIS [If different from owner]

Mailing Address: 2200 ENERGY DR

CANONSBURG, PA 15317-1000

Responsible Official

Name: JACK MAKIN Title: VP OPR

Phone: (412) 670 - 0726 Email: jmackin@equitransmidstream.com

**Permit Contact Person** 

Name: JIM KNIBLOE Title: ENV ENGR Phone: (412) 525 - 0609

Phone: (412) 525 - 0609 Email: jknibloe@equitransmidstream.com

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

MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION



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# **SECTION A.** Site Inventory List

Course	D. Course Name	Canaaite/Thuasahuset	Fuel/Material
Source I	D Source Name  3550 BHP, CAT G3612 COMPRESSOR ENG #1, SN	Capacity/Throughput N/A	Natural Gas
101	BKE00792	N/A N/A	Natural Gas
102	3550 BHP, CAT G3612 COMPRESSOR ENG #2, SN	N/A	Natural Gas
	BKE00790		
103	3550 BHP, CAT G3612 COMPRESSOR ENG #3, SN BKE00791	N/A	Natural Gas
104	3550 BHP, CAT G3612 COMPRESSOR ENG #4, SN BKE00788	N/A	Natural Gas
105	3550 BHP, CAT G3612 COMPRESSOR ENG #5, SN BKE00785	N/A	Natural Gas
106	3550 BHP, CAT G3612 COMPRESSOR ENG #6, SN BKE00799	N/A	Natural Gas
		N/A	
107	5000 BHP, CAT G3616 ENG #7, SN ZZY00158	N/A	Natural Gas
		N/A	
108	5000 BHP, CAT G3616 ENG #8, SN ZZY00703	N/A	Natural Gas
		N/A	
109	5000 BHP, CAT G3616 ENG #9, SN ZZY00701	N/A	Natural Gas
		N/A	
110	5000 BHP, CAT G3616 ENG #10, SN ZZY00704	N/A	Natural Gas
		N/A	
151	EMERGENCY DIESEL-FIRED ENGINE #1 (1220 BHP)	N/A	
152	EMERGENCY DIESEL-FIRED ENGINE #2 (1220 BHP)	N/A	
201	DEHYDRATOR #1 (200 MMSCFD)	N/A	Natural Gas
		N/A	
202	DEHYDRATOR #2 (200 MMSCFD)	N/A	Natural Gas
		N/A	
203	DEHYDRATOR #3 (200 MMSCFD)	N/A	Natural Gas
		N/A	
204	DEHYDRATOR #4 (200 MMSCFD)	N/A	Natural Gas
		N/A	
301	COMPONENT FUGITIVES	N/A	
		N/A	
401	HEATERS/REBOILERS	N/A	Natural Gas
501	STORAGE TANKS/VESSELS	N/A	Natural Gas
		N/A	
701	VENTING/BLOWDOWNS	N/A	Natural Gas
		N/A	
702	CRANKCASE VENTS	N/A	Natural Gas
703	ROD PACKING	N/A	Natural Gas
801	PIGGING ACTIVITIES	N/A	Natural Gas
C101	ENGINE #1 OX CAT		
C102	ENGINE #2 OX CAT		
C103	ENGINE #3 OX CAT		
C104	ENGINE #4 OX CAT		

DEP Auth ID: 1454404

DEP PF ID: 785708

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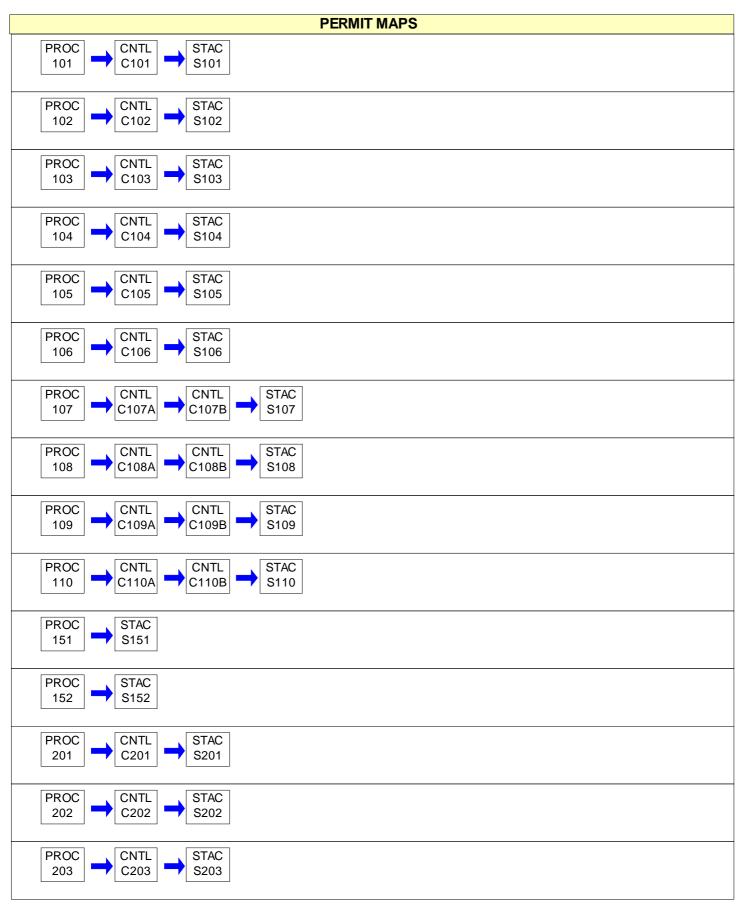
# **SECTION A.** Site Inventory List

Source I	D Source Name	Capacity/Throughput	Fuel/Material
C105	ENGINE #5 OX CAT		
C106	ENGINE #6 OX CAT		
C107A	ENGINE #7 OX CAT		
C107B	ENGINE #7 SCR		
C108A	ENGINE #8 OX CAT		
C108B	ENGINE #8 SCR		
C109A	ENGINE #9 OX CAT		
C109B	ENGINE #9 SCR		
C110A	ENGINE #10 OX CAT		
C110B	ENGINE #10 SCR		
C201	DEHY#1 THERMAL OXIDIZER		
C202	DEHY#2 THERMAL OXIDIZER		
C203	DEHY#3 THERMAL OXIDIZER		
C204	DEHY#4 THERMAL OXIDIZER		
S101	COMPRESSOR ENGINE #1 STACK		
S102	COMPRESSOR ENGINE #2 STACK		
S103	COMPRESSOR ENGINE #3 STACK		
S104	COMPRESSOR ENGINE #4 STACK		
S105	COMPRESSOR ENGINE #5 STACK		
S106	COMPRESSOR ENGINE #6 STACK		
S107	COMPRESSOR ENGINE #7 STACK		
S108	COMPRESSOR ENGINE #8 STACK		
S109	COMPRESSOR ENGINE #9 STACK		
S110	COMPRESSOR ENGINE #10 STACK		
S151	EMERGENCY ENGINE #1 STACK		
S152	EMERGENCY ENGINE #2 STACK		
S201	DEHYDRATOR #1 STACK		
S202	DEHYDRATOR #2 STACK		
S203	DEHYDRATOR #3 STACK		
S204	DEHYDRATOR #4 STACK		
S401	HEATERS/REBOILERS STACKS		
S801	PIGGING VENTS		
Z301	FUGITIVES		
Z501	FUGITIVES		
Z701	FUGITIVES		
Z702	CRANKCASE VENTS		
Z703	ROD PACKING EMISSIONS		

# **PERMIT MAPS**

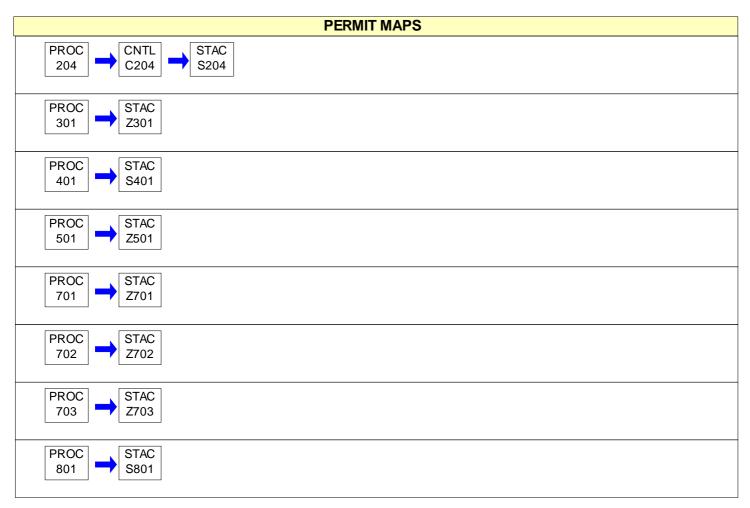
















#001 [25 Pa. Code § 121.1]

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.







- (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:





- (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:



- (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 NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:





- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
  - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
  - (4) Space heaters which heat by direct heat transfer.
  - (5) Laboratory equipment used exclusively for chemical or physical analysis.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

### #014 [25 Pa. Code § 127.3]

#### Operational Flexibility.

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

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)







- (6) Section 127.462 (relating to minor operating permit modifications)
- (7) Subchapter H (relating to general plan approvals and general operating permits)

#### #015 [25 Pa. Code § 127.11a]

### **Reactivation of Sources**

- (a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#### #016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

- (a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].
- (b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#### #017 [25 Pa. Code § 121.9]

### Circumvention.

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

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

### Reporting Requirements.

- (a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.
- (b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.
- (c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

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

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



records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

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

Sampling, Testing and Monitoring Procedures.

- (a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.
- (b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

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

### Recordkeeping.

- (a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:
  - (1) The date, place (as defined in the permit) and time of sampling or measurements.
  - (2) The dates the analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of the analyses.
  - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

### #021 [25 Pa. Code § 127.441(a)]

**Property Rights.** 

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

#022 [25 Pa. Code § 127.447]

**Alternative Operating Scenarios.** 

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





#023 [25 Pa. Code §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.





### 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) (8) Not applicable.
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.
- (b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.
  - (c) [See Work Practice Standards Requirements.]
  - (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 §127.441]

### Operating permit terms and conditions.

Emissions from all air contamination sources and associated air cleaning devices installed and operating at this Facility shall not exceed the following on a 12-month rolling sum basis:

- a. Nitrogen Oxides (NOx) 97.9 tons
- b. Volatile Organic Compounds (VOC) 27.2 tons
- c. Carbon Monoxide (CO) 73.7 tons
- d. Sulfur oxides (SOx) 1.7 tons
- e. PM-10 18.5 tons
- f. PM-2.5 18.5 tons
- g. Methanol 5.2 tons
- h. Formaldehyde 6.5 tons
- i. Total HAP 22.2 tons

### # 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 land the open burning is being conducted.
  - (3) The emissions interfere with the reasonable enjoyment of life or property.
  - (4) The emissions cause damage to vegetation or property.
  - (5) The emissions are or may be deleterious to human or animal health.
- (c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:





- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
  - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
  - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.
  - (6) A fire set solely for recreational or ceremonial purposes.
  - (7) A fire set solely for cooking food.
  - (d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
  - (1) As used in this subsection the following terms shall have the following meanings:

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

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

- (2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:
  - (i) Air curtain destructors shall be used when burning clearing and grubbing wastes.
- (ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).
- (iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.
- (iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.
- (3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:
- (i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.
- (ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.
- (4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.



### II. TESTING REQUIREMENTS.

### # 008 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

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

# # 009 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall submit one electronic copy of a pre-test protocol to the Department for review at least 90 days prior to the performance of any EPA reference method stack test. The permittee shall submit one electronic copy of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

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

- (a) At least 90 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval in accordance with paragraph (8) of this condition. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter, submitted at least 90 calendar days prior to commencing an emissions testing program, referencing the previously approved procedural protocol is sufficient if the letter is approved by the Department. The letter shall be submitted as required in paragraph (a). If modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack test manual has been revised since the approval, a new protocol shall be submitted for approval.
- (c) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Department in accordance with paragraph (h) of this condition. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (d) If the proposed testing did not occur per the required notification in paragraph (b) above, an electronic mail notification shall be sent within 15 calendar days after the expected completion date of the onsite testing to the Department, in accordance with paragraph (h) of this condition, indicating why the proposed completion date of the on-site testing was not adhered to.
- (e) A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the onsite testing portion of an emission test program.
- (1) The test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions.
  - (2) The summary results will include, at a minimum, the following information:
- (A) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - (B) Permit number(s) and condition(s) which are the basis for the evaluation.
  - (C) Summary of results with respect to each applicable permit condition.







- (D) Statement of compliance or non-compliance with each applicable permit condition.
- (f) Pursuant to 25 Pa. Code §139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (h) Pursuant to 25 Pa. Code §§ 139.53(a)(1) and 139.53(a)(3):
- (1) All submittals, except test notifications & portable emission monitor tests, shall be accomplished through PSIMS\*Online, available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp, if it is available.
- (2) For test notifications & portable analyzer results, or if internet submittal cannot be accomplished, one electronic copy of the test submission (notifications, protocols, reports, supplemental information, etc.) shall be sent to both PSIMS Administration in Central Office and to the Regional Office AQ Program Manager at the following addresses.

CENTRAL OFFICE: RA-EPstacktesting@pa.gov

SOUTHWEST REGIONAL OFFICE: RA-EPSWstacktesting@pa.gov

- (i) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.
- (j) Actions Related to Noncompliance Demonstrated by a Stack Test:
- (1) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permittee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (2) If the results of the required stack test exceed any limit defined in this permit, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the permit, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the permit, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the permit may be grounds for immediate revocation of the permit to operate the affected source.

### III. MONITORING REQUIREMENTS.

### # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A facility-wide inspection shall be conducted at a minimum of once each day that the Facility is visited by the Owner/Operator. The facility-wide inspection shall be conducted for the presence of the following:

a. Visible stack emissions;





- b. Fugitive emissions; and
- c. Potentially objectionable odors at the property line.

These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code §§123.1 or 123.2, and malodors prohibited under 25 Pa. Code §123.31. Observations for visible stack emissions shall be conducted during daylight hours and all observations shall be conducted while sources are in operation. If any visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, the Owner/Operator shall take corrective action. Records of each inspection shall be maintained in a log and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

#### IV. RECORDKEEPING REQUIREMENTS.

### # 011 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The Owner/Operator shall maintain the following comprehensive and accurate records:

- a. Emissions (expressed in tons) of NOx, CO, VOCs, total HAP, and HCHO on a 12-month rolling sum basis.
- b. The number of hours per month that each engine operated and on a 12-month rolling basis.
- c. The amount of fuel used per month by each engine and on a 12-month rolling basis.
- d. Urea injection rate prior to, and inlet temperature to each SCR control device.
- e. Records including a description of testing methods, results, all engine operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each engine.
- f. Copies of the report that demonstrates that each G3612 and G3616 engine was operating at maximum routine operating conditions and within 10 percent of 100 percent peak load (or the highest achievable load) during performance testing.
- g. Copies of the manufacturer's recommended maintenance schedule for each engine and catalyst.
- h. Records of any maintenance conducted on each engine, catalyst, triethylene glycol dehydrator, and enclosed flare.
- i. VOC emissions from each triethylene glycol dehydrator using GRI-GLYCalc computer software or an alternative method as approved by the Department.
- j. Records of actual natural gas throughput per day and the glycol circulation rate through each triethylene glycol dehydrator.
- k. Records of each equipment or pipeline (including pig receiver or launcher) blowdown at the facility including the date, time, and duration of the event, volume of gas vented, and calculated emissions of VOC, HAP, and CH4.
- I. Records of annual produced water throughput for each produced water storage tank at the Facility.
- m. Records of a fractional gas analysis performed at least once every six months on the inlet natural gas to the facility.
- n. Records of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.
- o. Records of any leak detected and associated repair activity through the leak detection and repair or maintenance program.
- p. Records of inspections of the SCR system at a minimum of once per calendar year but no sooner than three (3) calendar months from the date of the previous inspection.
- q. Records of the tuning and optimization of the ammonia injection grid at a minimum of once per calendar year and no sooner than three (3) calendar months from the date of the previous inspection.
- $r. \ \ Records \ of the \ catalyst \ maintenance \ plan \ (CMP) \ that \ include \ updates \ as \ warranted.$

# # 012 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

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

#### V. REPORTING REQUIREMENTS.

### # 013 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The Owner/operator shall provide U.S. EPA with the notifications required by 40 CFR §60.7. Required notifications may include but are not necessarily limited to: date of commencement of construction (within 30 days after starting





construction), actual start-up date (within 15 days after equipment start-up), and physical or operational changes which may increase the emission rate of any air pollutant to which a standard applies (60 days or as soon as practicable before equipment start-up).

#### # 014 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Annual emission reporting shall be conducted as follows: (Additional authority for this condition is derived from 25 Pa. Code Section §135.3)

- a. The Owner/Operator shall submit to the Department by March 1 of each year, a source report for the preceding calendar year for all sources authorized under this Plan Approval. 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. The source report; in a form as the Department may prescribe; for classes or categories of sources; shall show the actual emissions of NOx, CO, VOC, SOx, PM10, PM2.5, HAP (per the Department's Emissions Inventory Reporting Instructions), NH3, and GHG (including but not limited to CO2, CH4, and N2O) for each reporting period. A description of the method used to calculate the emissions and the time period over which the calculation is based shall be included. The report shall also contain a certification by a company officer or the plant manager that the information contained in the report is accurate.
- c. A source Owner/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 §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.
- (c) The report shall describe the following:
  - 1. name, permit or authorization number, and location of the facility,
  - 2. nature and cause of the malfunction, emergency or incident,
  - 3. date and time when the malfunction, emergency or incident was first observed,
  - 4. expected duration of excess emissions.
  - 5. estimated rate of emissions,
  - 6. corrective actions or preventative measures taken.
- 7. The 12-month rolling sum of emissions (including, but not limited to, criteria pollutants, VOCs, greenhouse gases, and total HAPs), including any emission increases that occurred as a result of the malfunction event.
- (d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall





contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

- (e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.
- (f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.
- (g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

### # 016 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The Owner/Operator shall submit results of periodic monitoring to the Department's Southwest Regional Office within thirty (30) calendar days after completion. 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.

# # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4] Subpart A - General Provisions Address.

The Facility is subject to the New Source Performance Standards from 40 CFR Part 60 Subparts IIII, JJJJ, and OOOOa. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals and other communications regarding the affected sources shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted or directed by the agency.

United States Environmental Protection Agency Pennsylvania Department of Environmental Protection

Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

1600 John F. Kennedy Boulevard Philadelphia, Pennsylvania 19103-2852

# # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13]

### **Subpart A--General Provisions**

### Addresses of State air pollution control agencies and EPA Regional Offices.

The Facility is subject to National Emission Standards for Hazardous Air Pollutants from 40 CFR Part 63 Subparts HH and ZZZZ. In accordance with 40 CFR §63.13, copies of all requests, reports, applications, submittals and other communications regarding the affected sources shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted or directed by the agency.

United States Environmental Protection Agency Pennsylvania Department of Environmental Protection

Region III, Air and Radiation Division
Permits Branch (3AD10)
Four Penn Center
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745

1600 John F. Kennedy Boulevard Philadelphia, Pennsylvania 19103-2852

### VI. WORK PRACTICE REQUIREMENTS.

# 019 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions





- (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.
- (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.

### # 020 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

All air contamination sources and air cleaning devices authorized under this state-only operating permit shall be operated per the manufacturer's specifications and maintained according to the manufacturer's recommended maintenance schedule.

### VII. ADDITIONAL REQUIREMENTS.

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

### 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.

DEP Auth ID: 1454404





Source ID: 101 Source Name: 3550 BHP, CAT G3612 COMPRESSOR ENG #1, SN BKE00792

Source Capacity/Throughput: N/A Natural Gas

N/A

Conditions for this source occur in the following groups: G01

G03 G04 G06



### I. RESTRICTIONS.

### **Emission Restriction(s).**

### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from G3612 A3 compressor engine (Source ID 101) shall not exceed the following:

At 100% or highest achievable load, plus or minus 10%:

- a. NOx 0.32 g/bhp-hr
- b. CO 0.19 g/bhp-hr
- c. VOC 0.02 g/bhp-hr\*
- d. Formaldehyde 0.02 g/bhp-hr\*\*

At all operating conditions excluding startup, shutdown, and malfunction:

- a. NOx 2.49 lb/hr
- b. CO 1.51 lb/hr
- c. VOC 0.15 lb/hr\*
- d. Formaldehyde 0.15 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320, and 320 or 328 (or Agency approved equivalent, includes formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

#### 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).





Source ID: 102 Source Name: 3550 BHP, CAT G3612 COMPRESSOR ENG #2, SN BKE00790

> Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: G01

G03 G04 G06



### RESTRICTIONS.

### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from G3612 A3 compressor engine (Source ID 102) shall not exceed the following:

At 100% or highest achievable load, plus or minus 10%:

- a. NOx 0.41 g/bhp-hr
- b. CO 0.19 g/bhp-hr
- c. VOC 0.09 g/bhp-hr\*
- d. Formaldehyde 0.03 g/bhp-hr\*\*

At all operating conditions excluding startup, shutdown, and malfunction:

- a. NOx 3.24 lb/hr
- b. CO 1.51 lb/hr
- c. VOC 0.71 lb/hr\*
- d. Formaldehyde 0.27 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320, and 320 or 328 (or Agency approved equivalent, includes formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

#### 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).

### 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).

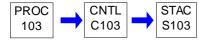


Source ID: 103 Source Name: 3550 BHP, CAT G3612 COMPRESSOR ENG #3, SN BKE00791

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: G01

G03 G04 G06



### I. RESTRICTIONS.

### **Emission Restriction(s).**

63-00999

### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from G3612 A3 compressor engine (Source ID 103) shall not exceed the following:

At 100% or highest achievable load, plus or minus 10%:

- a. NOx 0.36 g/bhp-hr
- b. CO 0.19 g/bhp-hr
- c. VOC 0.04 g/bhp-hr\*
- d. Formaldehyde 0.02 g/bhp-hr\*\*

At all operating conditions excluding startup, shutdown, and malfunction:

- a. NOx 2.85 lb/hr
- b. CO 1.51 lb/hr
- c.  $VOC 0.30 lb/hr^*$
- d. Formaldehyde 0.16 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320, and 320 or 328 (or Agency approved equivalent, includes formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

#### 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).







### 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).

### 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).

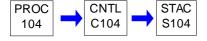


Source ID: 104 Source Name: 3550 BHP, CAT G3612 COMPRESSOR ENG #4, SN BKE00788

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: G01

G03 G04 G06



### I. RESTRICTIONS.

### **Emission Restriction(s).**

63-00999

### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from G3612 A3 compressor engine (Source ID 104) shall not exceed the following:

At 100% or highest achievable load, plus or minus 10%:

- a. NOx 0.37 g/bhp-hr
- b. CO 0.19 g/bhp-hr
- c. VOC 0.04 g/bhp-hr\*
- d. Formaldehyde 0.04 g/bhp-hr\*\*

At all operating conditions excluding startup, shutdown, and malfunction:

- e. NOx 2.93 lb/hr
- a. CO 1.51 lb/hr
- b.  $VOC 0.35 lb/hr^*$
- c. Formaldehyde 0.35 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320, and 320 or 328 (or Agency approved equivalent, includes formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

#### 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).







### 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).

### 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).



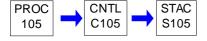


Source ID: 105 Source Name: 3550 BHP, CAT G3612 COMPRESSOR ENG #5, SN BKE00785

> Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: G01

G03 G04 G06



### RESTRICTIONS.

### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from G3612 A3 compressor engine (Source ID 105) shall not exceed the following:

At 100% or highest achievable load, plus or minus 10%:

- a. NOx 0.47 g/bhp-hr
- b. CO 0.19 g/bhp-hr
- c. VOC 0.04 g/bhp-hr\*
- d. Formaldehyde 0.04 g/bhp-hr\*\*

At all operating conditions excluding startup, shutdown, and malfunction:

- a. NOx 3.71 lb/hr
- b. CO 1.51 lb/hr
- c. VOC 0.31 lb/hr\*
- d. Formaldehyde 0.31 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320, and 320 or 328 (or Agency approved equivalent, includes formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

#### 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).

### 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).







### 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).

### 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).



63-00999



#### SECTION D. **Source Level Requirements**

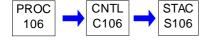
Source ID: 106 Source Name: 3550 BHP, CAT G3612 COMPRESSOR ENG #6, SN BKE00799

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G01

G03 G04 G06



### RESTRICTIONS.

### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Emissions from the G3612 A3 compressor engine (Source ID 106) shall not exceed the following:

At 100% or highest achievable load, plus or minus 10%:

- a. NOx 0.45 g/bhp-hr
- b. CO 0.19 g/bhp-hr
- c. VOC 0.13 g/bhp-hr\*
- d. Formaldehyde 0.04 g/bhp-hr\*\*

At all operating conditions excluding startup, shutdown, and malfunction:

- a. NOx 3.52 lb/hr
- b. CO 1.51 lb/hr
- c. VOC 1.00 lb/hr\*
- d. Formaldehyde 0.31 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320 (or Agency approved equivalent, does not include formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

### 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).

### 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).







### 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).

### 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).







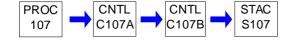
Source ID: 107 Source Name: 5000 BHP, CAT G3616 ENG #7, SN ZZY00158

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G01

G02 G03 G04 G06



## 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).

### 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).

#### RECORDKEEPING REQUIREMENTS. IV.

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).

## 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).

#### WORK PRACTICE REQUIREMENTS. VI.

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).







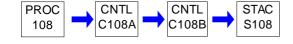
Source ID: 108 Source Name: 5000 BHP, CAT G3616 ENG #8, SN ZZY00703

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G01

G02 G03 G04 G06



## 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).

### 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).

#### RECORDKEEPING REQUIREMENTS. IV.

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).

## 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).

#### WORK PRACTICE REQUIREMENTS. VI.

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).







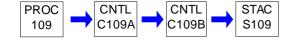
Source ID: 109 Source Name: 5000 BHP, CAT G3616 ENG #9, SN ZZY00701

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G01

G02 G03 G04 G06



## 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).

### 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).

#### RECORDKEEPING REQUIREMENTS. IV.

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).

## 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).

#### WORK PRACTICE REQUIREMENTS. VI.

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).







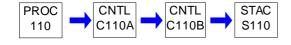
Source ID: 110 Source Name: 5000 BHP, CAT G3616 ENG #10, SN ZZY00704

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G01

G02 G03 G04 G06



## 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).

### 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).

#### RECORDKEEPING REQUIREMENTS. IV.

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).

## 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).

#### WORK PRACTICE REQUIREMENTS. VI.

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).



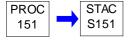




Source ID: 151 Source Name: EMERGENCY DIESEL-FIRED ENGINE #1 (1220 BHP)

Source Capacity/Throughput: N/A

Conditions for this source occur in the following groups: G08



#### 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).



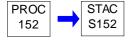




Source ID: 152 Source Name: EMERGENCY DIESEL-FIRED ENGINE #2 (1220 BHP)

Source Capacity/Throughput: N/A

Conditions for this source occur in the following groups: G08



#### 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).







Source ID: 201 Source Name: DEHYDRATOR #1 (200 MMSCFD)

Source Capacity/Throughput: N/A Natural Gas

N/A

Conditions for this source occur in the following groups: G05

G07



### 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).







Source ID: 202 Source Name: DEHYDRATOR #2 (200 MMSCFD)

Source Capacity/Throughput: N/A Natural Gas

N/A

Conditions for this source occur in the following groups: G05

G07



### 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).





Source ID: 203 Source Name: DEHYDRATOR #3 (200 MMSCFD)

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G05

G07



#### RESTRICTIONS. I.

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).

#### MONITORING REQUIREMENTS. III.

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).

#### RECORDKEEPING REQUIREMENTS. IV.

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).

## 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).

#### **WORK PRACTICE REQUIREMENTS.** VI.

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).

#### ADDITIONAL REQUIREMENTS. VII.

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).







Source ID: 204 Source Name: DEHYDRATOR #4 (200 MMSCFD)

> Source Capacity/Throughput: N/A Natural Gas

> > N/A

Conditions for this source occur in the following groups: G05

G07



#### RESTRICTIONS. I.

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).

#### MONITORING REQUIREMENTS. III.

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).

#### RECORDKEEPING REQUIREMENTS. IV.

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).

## 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).

#### **WORK PRACTICE REQUIREMENTS.** VI.

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).

#### ADDITIONAL REQUIREMENTS. VII.

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).





Source ID: 301 Source Name: COMPONENT FUGITIVES

> Source Capacity/Throughput: N/A

> > N/A

Conditions for this source occur in the following groups: G04



## 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).

### **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).

#### MONITORING REQUIREMENTS. III.

#### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (i) No later than 30 days after an emission source commences operation, and at least monthly thereafter, the owner or operator of a facility shall conduct an AVO inspection.
- (ii) No later than 60 days after initial startup, and quarterly thereafter, the owner or operator shall conduct an LDAR program using either an OGI camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection methods approved by the Division of Source Testing and Monitoring.
- (A) The owner or operator may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate DEP Regional Office.
- (B) Any fugitive emissions components that are difficult-to-monitor or unsafe-to-monitor must be identified in the monitoring plan described in Condition 2(a) below.
- (iii) The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method, or a Department-approved method.
- (iv) A leak is defined as:
- (A) Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection;
- (B) Any visible emissions detected by an OGI camera calibrated according to 40 CFR §60.18 and a detection sensitivity level of 60 grams/hour; or
- (C) A concentration of 500 ppm calibrated as methane or greater detected by an instrument reading.
- (v) For quarterly inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the owner or operator may choose to adjust the detection instrument readings to account for the background organic concentration level as determined according to the procedures in Section 8.3.2.
- (vi) Any leak detected from a fugitive emission component shall be repaired by the owner or operator of the facility as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must





be completed no later than 15 calendar days after the leak is detected unless:

- (A) The owner or operator must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or
- (B) The repair or replacement is technically infeasible, would require a vent blowdown, a compressor station, processing plant or transmission station shutdown, or would be unsafe to repair during operation of the unit, in which case the repair or replacement must be completed during the next scheduled compressor station, processing plant or transmission station shutdown, after a planned vent blowdown or within 2 years, whichever is earlier.
- (vii) Once a fugitive emission component has been repaired or replaced, the owner or operator must resurvey the component as soon as practicable, but no later than 30 calendar days after the leak is repaired.
- (A) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.
- (B) A leak is considered repaired if:
- (1) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;
- (2) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the component;
- (3) There is no visible leak image when using an OGI camera calibrated at a detection sensitivity level of 60 grams/hour; or
- (4) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part 60, Appendix A-7, Method 21.

#### IV. RECORDKEEPING REQUIREMENTS.

## # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) A fugitive emissions monitoring plan.
- (b) Records of each monitoring survey which must include:
- (i) The facility name and location;
- (ii) The state-only operating permit number;
- (iii) The date, start time, and end time of the survey;
- (iv) The name of the operator(s) performing the survey;
- (v) The monitoring instrument used;
- (vi) The ambient temperature, sky conditions, and maximum wind speed at the time of the survey;
- (vii) Any deviations from the monitoring plan or a statement that there were none; and
- (viii) Documentation of each fugitive emission including:
- (A) The identification of each component from which fugitive emissions were detected;
- (B) The instrument reading of each fugitive emissions component that meets the leak definition in Condition 1(b)(iv)(C) of this section:
- (C) The status of repair of each component including:
- (1) The repair methods applied in each attempt to repair the component;





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

### V. REPORTING REQUIREMENTS.

#### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The emissions from fugitive emissions components during the reporting period must be included in the annual AES emissions inventory reports as required in Section C of this state-only operating permit.

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Acceptable leak detection methods include any of the following:

- a. Optical gas imaging instrument. Use an optical gas imaging instrument for equipment leak detection in accordance with 40 CFR Part 60, Subpart A, §60.18 of the Alternative work practice for monitoring equipment leaks, §60.18(i)(1)(i); §60.18(i)(2)(i) except that the monitoring frequency shall be annual using the detection sensitivity level of 60 grams per hour as stated in 40 CFR Part 60, Subpart A, Table 1: Detection Sensitivity Levels; § 60.18(i)(2)(ii) and (iii) except the gas chosen shall be methane, and §60.18(i)(2)(iv) and (v); §60.18(i)(3); §60.18(i)(4)(i) and (v); including the requirements for daily instrument checks and distances, and excluding requirements for video records. Any emissions detected by the optical gas imaging instrument is a leak unless screened with Method 21 (40 CFR part 60, appendix A-7) monitoring, in which case 10,000 ppm or greater is designated a leak. In addition, you must operate the optical gas imaging instrument to image the source types required by this subpart in accordance with the instrument manufacturer's operating parameters. Unless using methods in paragraph (b) of this condition, an optical gas imaging instrument must be used for all source types that are inaccessible and cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
- b. Method 21. Use the equipment leak detection methods in 40 CFR part 60, appendix A-7, Method 21. If using Method 21 monitoring, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. Inaccessible emissions sources, as defined in 40 CFR Part 60, are not exempt from this subpart. Owners or operators must use alternative leak detection devices as described in paragraph (a) or (b) of this condition to monitor inaccessible equipment leaks or vented emissions.
- c. Infrared laser beam illuminated instrument. Use an infrared laser beam illuminated instrument for equipment leak detection. Any emissions detected by the infrared laser beam illuminated instrument is a leak unless screened with Method 21 monitoring, in which case 10,000 ppm or greater is designated a leak. In addition, you must operate the infrared laser beam illuminated instrument to detect the source types required by this subpart in accordance with the instrument manufacturer's operating parameters.
- d. Acoustic leak detection device. Use the acoustic leak detection device to detect through-valve leakage. When using the acoustic leak detection device to quantify the through-valve leakage, you must use the instrument manufacturer's calculation methods to quantify the through-valve leak. When using the acoustic leak detection device, if a leak of 3.1 scf per hour or greater is calculated, a leak is detected. In addition, you must operate the acoustic leak detection device to monitor the source valves required by 40 CFR Part 60 Subpart W in accordance with the instrument manufacturer's operating



parameters. Acoustic stethoscope type devices designed to detect through valve leakage when put in contact with the valve body and that provide an audible leak signal but do not calculate a leak rate can be used to identify non-leakers with subsequent measurement required to calculate the rate if through-valve leakage is identified. Leaks are reported if a leak rate of 3.1 scf per hour or greater is measured.

## 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).





Source ID: 401 Source Name: HEATERS/REBOILERS

> Source Capacity/Throughput: N/A Natural Gas

**PROC STAC** S401 401

### RESTRICTIONS.

## **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.22]

### **Combustion units**

- (a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:
- (1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period, except as provided in paragraph (4).
- (2) (4) Not applicable.
- (b) (g) Not applicable.

#### **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).

### RECORDKEEPING REQUIREMENTS.

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

### REPORTING REQUIREMENTS.

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

#### WORK PRACTICE REQUIREMENTS. VI.

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

#### VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 501 Source Name: STORAGE TANKS/VESSELS

Source Capacity/Throughput: N/A Natural Gas

N/A



#### I. RESTRICTIONS.

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

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

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

### IV. RECORDKEEPING REQUIREMENTS.

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

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

### # 001 [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 0.7 psig (4.8 kilopascals) of pressure or 0.3 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).



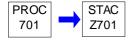




Source ID: 701 Source Name: VENTING/BLOWDOWNS

> Source Capacity/Throughput: N/A Natural Gas

> > N/A



63-00999

#### RESTRICTIONS.

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

### TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

# 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall maintain records of the date, time, duration, volume of natural gas released, and emissions from each blowdown and emergency shutdown at the facility.

## REPORTING REQUIREMENTS.

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall report any unplanned emergency shutdown (ESD) event that occurs at this facility in accordance with the malfunction reporting requirements of Section C of this permit.

#### WORK PRACTICE REQUIREMENTS. VI.

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

#### VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 702 Source Name: CRANKCASE VENTS

Source Capacity/Throughput: N/A Natural Gas



### I. RESTRICTIONS.

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

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

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

## IV. RECORDKEEPING REQUIREMENTS.

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

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

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

### VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 703 Source Name: ROD PACKING

> Source Capacity/Throughput: N/A Natural Gas



63-00999

#### I. RESTRICTIONS.

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

### TESTING REQUIREMENTS.

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

#### MONITORING REQUIREMENTS. III.

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).

### REPORTING REQUIREMENTS.

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

#### WORK PRACTICE REQUIREMENTS. VI.

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

#### VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 801 Source Name: PIGGING ACTIVITIES

> Source Capacity/Throughput: N/A Natural Gas



#### RESTRICTIONS.

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

### 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.

For each pigging operation, the owner or operator shall maintain the following records:

- (a) The identification, location, and date of construction of each pig launcher or receiver;
- (b) Records of each pigging operation including the identification of the pig chamber used, the date and time of the pigging operation, and the type and volume of liquids cleared; and
- (c) The emissions calculation for each pig chamber, using the Department's spreadsheet found at http://files.dep.state.pa.us/ or other equivalent method.

#### REPORTING REQUIREMENTS.

#### # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emissions from each pigging operation conducted during the reporting period must be included in the emissions inventory report under 25 Pa. Code §135.3.

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator that conducts pigging operations shall employ best management practices to minimize the liquids present in the pig receiver chamber and to minimize emissions from the pig receiver chamber including, but not limited to, installing liquids ramps, installing liquids drain, routing high-pressure chambers to a low-pressure line or vessel, using ball valve type chambers, or using multiple pig chambers. The selection of the appropriate best management practices must be documented.







## VII. ADDITIONAL REQUIREMENTS.

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





Group Name: G01

Group Description: Compressor Engines

Sources included in this group

ID	Name
101	3550 BHP, CAT G3612 COMPRESSOR ENG #1, SN BKE00792
102	3550 BHP, CAT G3612 COMPRESSOR ENG #2, SN BKE00790
103	3550 BHP, CAT G3612 COMPRESSOR ENG #3, SN BKE00791
104	3550 BHP, CAT G3612 COMPRESSOR ENG #4, SN BKE00788
105	3550 BHP, CAT G3612 COMPRESSOR ENG #5, SN BKE00785
106	3550 BHP, CAT G3612 COMPRESSOR ENG #6, SN BKE00799
107	5000 BHP, CAT G3616 ENG #7, SN ZZY00158
108	5000 BHP, CAT G3616 ENG #8, SN ZZY00703
109	5000 BHP, CAT G3616 ENG #9, SN ZZY00701
110	5000 BHP, CAT G3616 ENG #10, SN ZZY00704

### I. RESTRICTIONS.

## **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from each engine stack shall not exceed the following limitations:

- a. Equal to or greater than 10% opacity for a period or periods aggregating more than three minutes in any one hour.
- b. Equal to or greater than 30% opacity at any time.

## **Operation Hours Restriction(s).**

#### [25 Pa. Code §127.441] # 002

Operating permit terms and conditions.

Operation of each Caterpillar G3612 A3 and G3616 A4 compressor engine shall not exceed 8,725 hours in any consecutive 12-month period.

### II. TESTING REQUIREMENTS.

#### # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Owner/Operator shall perform NOx, CO, VOC, and formaldehyde emission tests upon each Caterpillar G3612 A3 and G3616 A4 compressor engine at the Facility according to the requirements of 40 CFR §60.4243 and §60.4244, §63.6610, and §63.6620. Initial emission testing is required within one hundred eighty (180) days of startup of each compressor engine. EPA Method stack testing shall be conducted for the initial stack test and at a minimum of once every 8,760 hours of operation or every three (3) years, whichever occurs first, from the date of the previous EPA Method test.

#### # 004 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) When conducting a performance test for an engine, the owner or operator must submit the test protocol described in Section C for review and approval.
- (b) The owner or operator should conduct the following test procedures:
- (i) Conduct three test runs of at least one hour duration within 10% of 100% peak (or the highest achievable) load.
  - (ii) Select the sampling port location and the number and location of traverse points at the exhaust using



40 CFR Part 60, Appendix A-1, Method 1 or 1A depending on stack diameter, or the sampling points selected according to 40 CFR Part 60, Appendix A-4, Method 7E Section 8.1.2.

- (iii) Determine the effluent characteristics by either:
- (A) Calculating the exhaust flow in accordance with 40 CFR Part 60, Appendix A-7, Method 19 and measuring the O2 concentration using 40 CFR Part 60, Appendix A-2, Method 3A; or
  - (B) By measuring:
- (1) The flow velocity, stack temperature, static pressure, and barometric pressure using 40 CFR Part 60, Appendix A-1, Method 2 or 2C depending on stack diameter;
  - (2) The gas density using 40 CFR Part 60, Appendix A-2, Method 3A; and
  - (3) The moisture content using 40 CFR Part 60, Appendix A-3, Method 4.
  - (iv) Simultaneous to the determination of the O2 concentration in (iii)(A) or (B) above, determine:
    - (A) The NOx concentration of the exhaust gas using 40 CFR Part 60, Appendix A-4, Method 7E;
  - (B) The CO concentration of the exhaust gas using 40 CFR Part 60, Appendix A-4, Method 10;
  - (C) The NMNEHC concentration, as propane, excluding formaldehyde of the exhaust gas using ALT-106; and
  - (D) The formaldehyde concentration of the exhaust gas, if applicable, using 40 CFR Part 63, Appendix A, Method 320.
- (c) If at any time the owner or operator operates the engine in excess of the highest achievable load plus 10%, the owner or operator must perform a stack test within 180 days from the anomalous operation.

#### III. MONITORING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Owner/Operator shall perform periodic monitoring for NOx and CO emissions from each Caterpillar G3612 A3 and G3616 A4 compressor engine at the Facility. Periodic monitoring shall be performed every 2,500 hours of operation and no sooner than 45 days from the previous test. A Department-approved test that has been performed within 45 days prior to the scheduled periodic monitoring may be used in lieu of the periodic monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three 20-minute test runs. The Department may alter the frequency of portable analyzer tests based on the test results. 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. The Department may also waive all or parts of this requirement if the Owner/Operator demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department. Periodic NOx and CO monitoring results shall be submitted to the Department within 30 days of completion.

#### # 006 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) When conducting periodic monitoring on an engine, the owner or operator may follow the procedures in (b) below. If the owner or operator decides to deviate from those procedures, they must submit a request to use an alternate procedure, in writing, at least 60 days prior to performing the periodic monitoring. In the alternate procedure request, the owner or operator must demonstrate the alternate procedure's equivalence to the standard procedure to the satisfaction of the Division of Source Testing and Monitoring.
- (b) Standardized Periodic Monitoring Procedure.
- (i) Conduct three test runs of at least 20 minutes duration within 10% of 100% peak (or the highest achievable) load.
- (ii) Determine NOx and CO emissions and O2 concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522 or by following the procedures specified below:





- (A) Select the sampling port location and the number and location of traverse points at the exhaust using 40 CFR Part
- 60, Appendix A-1, Method 1 or 1A depending on stack diameter, or the sampling points selected according to 40 CFR Part 60, Appendix A-4, Method 7E Section 8.1.2.
  - (B) Determine the effluent characteristics by either:
- (1) Calculating the exhaust flow in accordance with 40 CFR Part 60, Appendix A-7, Method 19 and measuring the O2 concentration using 40 CFR Part 60, Appendix A-2, Method 3A; or
  - (2) By measuring:
- (i) The flow velocity, stack temperature, static pressure, and barometric pressure using 40 CFR Part 60, Appendix A-1, Method 2 or 2C depending on stack diameter;
  - (ii) The gas density using 40 CFR Part 60, Appendix A-2, Method 3A; and
  - (iii) The moisture content using 40 CFR Part 60, Appendix A-3, Method 4.
  - (C) Simultaneous to the determination of the O2 concentration in (B)(1) or (2) above, determine:
    - (i) The NOx concentration of the exhaust gas using 40 CFR Part 60, Appendix A-4, Method 7E;
    - (ii) The CO concentration of the exhaust gas using 40 CFR Part 60, Appendix A-4, Method 10;
- (iii) If the measured NOx or CO emissions concentrations are in exceedance of the emissions limit, the owner or operator must perform a stack test in accordance with the Performance Testing Requirements of Condition 4 within 180 days of the periodic monitoring.
- (c) The 2,500 hours of operation count resets after any performance test performed.

### # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall install, operate, and maintain a non-resettable hour meter on each compressor engine at this facility.

### IV. RECORDKEEPING REQUIREMENTS.

### # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

- (a) The state-only operating permit authorization number and the date each engine was authorized for use;
- (b) The make, model, and serial number of each engine;
- (c) Either a copy of the manufacturer's maintenance instructions or an alternative maintenance plan;
- (d) Records of maintenance conducted on each engine and any installed air pollution control devices;
- (e) A copy of the manufacturer's engine certification or vendor guarantees;
- (f) The results of each periodic monitoring;
- $\hbox{(g) The summary for each complete performance testing report;}\\$
- (h) The emissions calculations for each engine in accordance with 25 Pa. Code §135.5;
- (i) The number of hours each engine operating per month and on a 12-month rolling basis; and
- (j) The fuel consumed by each engine operating per month and on a 12-month rolling basis.

#### V. REPORTING REQUIREMENTS.

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



## 63-00999



# **SECTION E.** Source Group Restrictions.

### VI. WORK PRACTICE REQUIREMENTS.

## # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the engine's time spent at idle during startup or shutdown to a period appropriate for the operation of the engine and air pollution control equipment consistent with good air pollution control practices, not to exceed 30 minutes, during which time the g/bhp-hr emissions standards for each respective engine in Section D do not apply.

## VII. ADDITIONAL REQUIREMENTS.

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





Group Name: G02

Group Description: Caterpillar G3616 A4 Compressor Engines

Sources included in this group

ID	Name
107	5000 BHP, CAT G3616 ENG #7, SN ZZY00158
108	5000 BHP, CAT G3616 ENG #8, SN ZZY00703
109	5000 BHP, CAT G3616 ENG #9, SN ZZY00701
110	5000 BHP, CAT G3616 ENG #10, SN ZZY00704

### I. RESTRICTIONS.

## **Emission Restriction(s).**

## # 001 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Emissions from each G3616 A4 compressor engine (Source IDs 107-110) shall not exceed the following:

At 100% of highest achievable load, plus or minus 10%:

- a. NOx 0.030 g/bhp-hr
- b. CO 0.070 g/bhp-hr
- c. VOC 0.050 g/bhp-hr\*
- d. Formaldehyde 0.010 g/bhp-hr\*\*
- e. Ammonia Slip 10 ppmvd @ 15% O2

At all operating conditions excluding startup, shutdown, and malfunction:

- a. NOx 0.33 lb/hr
- b. CO 0.77 lb/hr
- c. VOC 0.55 lb/hr\*
- d. Formaldehyde 0.11 lb/hr\*\*
- \* Based on U.S. EPA Methods 18/25A or 25A/320 (or Agency approved equivalent, does not include formaldehyde)
- \*\* Based on U.S. EPA Methods 320 or 328 (or Agency approved equivalent)

### II. TESTING REQUIREMENTS.

### # 002 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The Owner/Operator shall perform ammonia (NH3) slip emission tests upon each Caterpillar G3616 A4 compressor engine equipped with SCR according to the requirements of 25 Pa. Code Chapter 139. Initial emission testing is required within 180 days of startup of each compressor engine. EPA Method stack testing shall be conducted for the initial stack test and once every five years from the previous EPA Method test.

### III. MONITORING REQUIREMENTS.

### # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Owner/Operator shall continuously monitor the following:

- · Urea injection rate prior to the catalyst bed for each SCR control device; and
- The inlet temperature to the catalyst bed for each SCR control device.

### IV. RECORDKEEPING REQUIREMENTS.

## # 004 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Owner/Operator shall maintain records of the following:

- The continuously monitored urea injection rate prior to the catalyst bed for each SCR control device; and
- The continuously monitored inlet temperature to the catalyst bed for each SCR control device.







## # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The Owner/Operator shall maintain the following records:

- 1.) Records of inspections of the SCR system at a minimum of once per calendar year but no sooner than three (3) calendar months from the date of the previous inspection.
- 2.) Records of the tuning and optimization of the ammonia injection grid at a minimum of once per calendar year and no sooner than three (3) calendar months from the date of the previous inspection.
- 3.) Records of the catalyst maintenance plan (CMP) that include updates as warranted.

### 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.

## # 006 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Inlet temperature to the EMIT Technologies (or equivalent) SCR catalyst installed on each Caterpillar G3616 A4 compressor engine shall be maintained within the manufacturer's design operating temperature range under all operating conditions excluding startup and shutdown.

## # 007 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The Owner/Operator shall conduct the following work practice standards:

- 1.) Inspect the SCR system at a minimum of once per calendar year and no sooner than three (3) calendar months from the date of the previous inspection.
- 2.) Tune and optimize the ammonia injection grid at a minimum of once per calendar year and no sooner than three (3) calendar months from the date of the previous inspection.
- 3.) Develop a catalyst management plan (CMP) within sixty (60) days of the date of issuance of this authorization. The CMP shall be updated as needed if the catalyst manufacturer changes, if there are any physical or operational changes to the compressor engines using SCR, or if any other change, using engineering judgment, technical expertise, manufacturer recommendations, or other criteria merits updating the CMP.

## VII. ADDITIONAL REQUIREMENTS.

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





Group Name: G03

Group Description: NSPS JJJJ Stationary SI ICE

Sources included in this group

ID	Name
101	3550 BHP, CAT G3612 COMPRESSOR ENG #1, SN BKE00792
102	3550 BHP, CAT G3612 COMPRESSOR ENG #2, SN BKE00790
103	3550 BHP, CAT G3612 COMPRESSOR ENG #3, SN BKE00791
104	3550 BHP, CAT G3612 COMPRESSOR ENG #4, SN BKE00788
105	3550 BHP, CAT G3612 COMPRESSOR ENG #5, SN BKE00785
106	3550 BHP, CAT G3612 COMPRESSOR ENG #6, SN BKE00799
107	5000 BHP, CAT G3616 ENG #7, SN ZZY00158
108	5000 BHP, CAT G3616 ENG #8, SN ZZY00703
109	5000 BHP, CAT G3616 ENG #9, SN ZZY00701
110	5000 BHP, CAT G3616 ENG #10, SN ZZY00704

### 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.

# 001 [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?

As an Owner/Operator of stationary SI ICE subject to the emission standards specified in §60.4233(e), you must demonstrate compliance according to one of the methods specified in paragraphs a. and b. of this condition.

- a. 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 40 CFR §60.4243(a).
- b. 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. N/A
- 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.

# 002 [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.

- 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:





 $ER = (Cd*1.912*10^{-3})*Q*T)/(HP-hr) (Eq. 1)$ 

Where:

ER = Emission rate of NOx in g/HP-hr

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

1.912×10-3 = 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:

 $ER = (Cd*1.164*10^{-3})*Q*T)/(HP-hr) (Eq. 2)$ 

Where:

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

Cd= Measured CO concentration in ppmv.

1.164×10-3 = 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:

 $ER = (Cd*1.833*10^{-3})*Q*T)/(HP-hr) (Eq. 3)$ 

Where:

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

Cd= VOC concentration measured as propane in ppmv.

1.833×10-3 = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 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.

RFi = CMi/CAi (Eq. 4)

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.

Cicorr = RFi\*Cimeas (Eq. 5)

Where:

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

Cimeas = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

Cpeq = 0.6098\*Cicorr (Eq. 6)

Where:

Cpeq = Concentration of compound i in mg of propane equivalent per DSCM.

### 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 [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.
- i. All notifications submitted to comply with this subpart and all documentation supporting any notification.
- ii. Maintenance conducted on the engine.
- iii. 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.
- iv. 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. N/A
- 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.
- i. Name and address of the owner or operator;
- ii. The address of the affected source;





- iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- iv. Emission control equipment; and
- v. 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.
- e. N/

### 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.

# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

Each Caterpillar G3612 A3 and G3616 A4 compressor engine approved to be installed or temporarily operated under this Plan Approval (Source IDs 101-110) is subject to the requirements under 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

The Owner/Operator shall comply with the applicable General Provisions in 40 CFR §§60.1 through 60.19 as identified in Table 3 to 40 CFR Part 60 Subpart JJJJ.

# 006 [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?

All terms used in 40 CFR Part 60 Subpart JJJJ shall have the meaning given in 40 CFR §60.4248 or else in the Clean Air Act and 40 CFR Part 60 Subpart A.







Group Name: G04

Group Description: NSPS OOOOa Reciprocating Compressors and Fugitive Emissions Components

Sources included in this group

ID	Name
101	3550 BHP, CAT G3612 COMPRESSOR ENG #1, SN BKE00792
102	3550 BHP, CAT G3612 COMPRESSOR ENG #2, SN BKE00790
103	3550 BHP, CAT G3612 COMPRESSOR ENG #3, SN BKE00791
104	3550 BHP, CAT G3612 COMPRESSOR ENG #4, SN BKE00788
105	3550 BHP, CAT G3612 COMPRESSOR ENG #5, SN BKE00785
106	3550 BHP, CAT G3612 COMPRESSOR ENG #6, SN BKE00799
107	5000 BHP, CAT G3616 ENG #7, SN ZZY00158
108	5000 BHP, CAT G3616 ENG #8, SN ZZY00703
109	5000 BHP, CAT G3616 ENG #9, SN ZZY00701
110	5000 BHP, CAT G3616 ENG #10, SN ZZY00704
301	COMPONENT FUGITIVES

#### RESTRICTIONS.

## **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Owner/Operator shall comply with the following applicable 40 CFR Part 60 Subpart OOOOa GHG and VOC standards for each reciprocating compressor affected facility: (Additional authority for this condition is derived from 40 CFR §60.5385a)

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

- a. You must replace the reciprocating compressor rod packing according to either paragraph (a)(1) or (2) of this section, or you must comply with paragraph (a)(3) of this section.
- (1) On or before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
- (2) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.
- (3) Collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of §60.5411a(a) and (d).
- b. You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410a(c).
- c. You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5415a(c).
- d. You must perform the reporting as required by §60.5420a(b)(1) and (4) and the recordkeeping as required by §60.5420a(c)(3), (6) through (9), and (17), as applicable.

#### # 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The Owner/Operator shall comply with the following applicable 40 CFR Part 60 Subpart OOOOa fugitive emissions GHG and VOC standards for each collection of fugitive emissions components at a compressor station: (Additional authority for this condition is derived from 40 CFR §60.5397a)

For each affected facility under §60.5365a(i) and (j), you must reduce GHG (in the form of a limitation on emissions of





methane) and VOC emissions by complying with the requirements of paragraphs (a) through (j) of this section. These requirements are independent of the closed vent system and cover requirements in §60.5411a.

- a. You must monitor all fugitive emission components, as defined in §60.5430a, in accordance with paragraphs (b) through (g) of this section. You must repair all sources of fugitive emissions in accordance with paragraph (h) of this section. You must keep records in accordance with paragraph (i) of this section and report in accordance with paragraph (j) of this section. For purposes of this section, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.
- b. You must develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites and compressor stations within each company-defined area in accordance with paragraphs (c) and (d) of this section.
- c. Fugitive emissions monitoring plans must include the elements specified in paragraphs (c)(1) through (8) of this section, at a minimum.
- (1) Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by paragraphs (f) and (g) of this section.
- (2) Technique for determining fugitive emissions (i.e., Method 21 at 40 CFR part 60, appendix A-7, or optical gas imaging).
- (3) Manufacturer and model number of fugitive emissions detection equipment to be used.
- (4) Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. Your repair schedule must meet the requirements of paragraph (h) of this section at a minimum.
- (5) Procedures and timeframes for verifying fugitive emission component repairs.
- (6) Records that will be kept and the length of time records will be kept.
- (7) If you are using optical gas imaging, your plan must also include the elements specified in paragraphs (c)(7)(i) through (vii) of this section.
- i. Verification that your optical gas imaging equipment meets the specifications of paragraphs (c)(7)(i)(A) and (B) of this section. This verification is an initial verification and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitives emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.
- (A) Your optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.
- (B) Your optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of =60g/hr from a quarter inch diameter orifice.
- ii. Procedure for a daily verification check.
- iii. Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.
- iv. Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.
- v. Procedures for conducting surveys, including the items specified in paragraphs (c)(7)(v)(A) through (C) of this section.
- (A) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.
- (B) How the operator will deal with adverse monitoring conditions, such as wind.
- (C) How the operator will deal with interferences (e.g., steam).



63-00999

- vi. Training and experience needed prior to performing surveys.
- vii. Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.
- (8) If you are using Method 21 of appendix A-7 of this part, your plan must also include the elements specified in paragraphs (c)(8)(i) and (ii) of this section. For the purposes of complying with the fugitive emissions monitoring program using Method 21 a fugitive emission is defined as an instrument reading of 500 ppm or greater.
- i. Verification that your monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If you wish to use an analyzer other than a FID-based instrument, you must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to your compound of interest).
- ii. Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A-7, including Section 8.3.1.
- d. Each fugitive emissions monitoring plan must include the elements specified in paragraphs (d)(1) through (4) of this section, at a minimum, as applicable.
- (1) Sitemap.
- (2) A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences.
- (3) If you are using Method 21, your plan must also include a list of fugitive emissions components to be monitored and method for determining location of fugitive emissions components to be monitored in the field (e.g. tagging, identification on a process and instrumentation diagram, etc.).
- (4) Your plan must also include the written plan developed for all of the fugitive emission components designated as difficult-to-monitor in accordance with paragraph (g)(3)(i) of this section, and the written plan for fugitive emission components designated as unsafe-to-monitor in accordance with paragraph (g)(3)(ii) of this section.
- e. Each monitoring survey shall observe each fugitive emissions component, as defined in §60.5430a, for fugitive emissions.

f.

- (1) N/A
- (2) You must conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each new collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive components at a compressor station, the initial monitoring survey must be conducted within 60 days of the modification or by June 3, 2017, whichever is later.
- g. A monitoring survey of each collection of fugitive emissions components at a well site or at a compressor station must be performed at the frequencies specified in paragraphs (g)(1) and (2) of this section, with the exceptions noted in paragraphs (g)(3) and (4) of this section.
- (1) N/A
- (2) A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.
- (3) Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of paragraphs (g)(3)(i) through (iv) of this section.

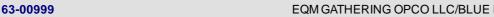




- i. A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.
- ii. The plan must include the identification and location of each fugitive emissions component designated as difficult-to-
- iii. The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.
- iv. The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.
- (4) Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of paragraphs (g)(4)(i) through (iv) of this section.
- i. A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.
- ii. The plan must include the identification and location of each fugitive emissions component designated as unsafe-tomonitor.
- iii. The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.
- iv. The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

### (5) N/A

- h. Each identified source of fugitive emissions shall be repaired or replaced in accordance with paragraphs (h)(1) and (2) of this section. For fugitive emissions components also subject to the repair provisions of §§60.5416a(b)(9) through (12) and (c)(4) through (7), those provisions apply instead to those closed vent system and covers, and the repair provisions of paragraphs (h)(1) and (2) of this section do not apply to those closed vent systems and covers.
- (1) Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.
- (2) If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier.
- (3) Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions.
- i. For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions.
- ii. For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken, must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).
- iii. Operators that use Method 21 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in paragraphs (h)(3)(iii)(A) and (B) of this section.
- (A) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 are used.



- (B) Operators must use the Method 21 monitoring requirements specified in paragraph (c)(8)(ii) of this section or the alternative screening procedures specified in section 8.3.3 of Method 21.
- iv. Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in paragraphs (h)(3)(iv)(A) and (B) of this section.
- (A) A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.
- (B) Operators must use the optical gas imaging monitoring requirements specified in paragraph (c)(7) of this section.
- i. Records for each monitoring survey shall be maintained as specified §60.5420a(c)(15).
- j. Annual reports shall be submitted for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station that include the information specified in §60.5420a(b)(7). Multiple collection of fugitive emissions components at a well site or at a compressor station may be included in a single annual report.

#### # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The Owner/Operator may comply with 40 CFR Part 60 Subpart OOOOa alternative applicable means of emission limitations for GHG And VOC from reciprocating compressors and the collection of fugitive emissions components at a compressor station. (Additional authority for this condition is derived from 40 CFR §60.5398a)

- a. If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in GHG (in the form of a limitation on emission of methane) and VOC emissions at least equivalent to the reduction in GHG and VOC emissions achieved under §60.5375a, §60.5385a, and §60.5397a, the Administrator will publish, in the Federal Register, a notice permitting the use of that alternative means for the purpose of compliance with §60.5375a, §60.5385a, and §60.5397a. The notice may condition permission on requirements related to the operation and maintenance of the alternative means.
- b. Any notice under paragraph (a) of this section must be published only after notice and an opportunity for a public hearing.
- c. The Administrator will consider applications under this section from either owners or operators of affected facilities.
- d. Determination of equivalence to the design, equipment, work practice or operational requirements of this section will be evaluated by the following guidelines:
- (1) The applicant must collect, verify and submit test data, covering a period of at least 12 months to demonstrate the equivalence of the alternative means of emission limitation. The application must include the following information:
- i. A description of the technology or process.
- ii. The monitoring instrument and measurement technology or process.
- iii. A description of performance based procedures (i.e., method) and data quality indicators for precision and bias; the method detection limit of the technology or process.
- iv. For affected facilities under §60.5397a, the action criteria and level at which a fugitive emission exists.
- v. Any initial and ongoing quality assurance/quality control measures.
- vi. Timeframes for conducting ongoing quality assurance/quality control.
- vii. Field data verifying viability and detection capabilities of the technology or process.
- viii. Frequency of measurements.
- ix. Minimum data availability.
- x. Any restrictions for using the technology or process.
- xi. Operation and maintenance procedures and other provisions necessary to ensure reduction in methane and VOC emissions at least equivalent to the reduction in methane and VOC emissions achieved under §60.5397a.
- xii. Initial and continuous compliance procedures, including recordkeeping and reporting.
- (2) For each determination of equivalency requested, the emission reduction achieved by the design, equipment, work practice or operational requirements shall be demonstrated.





- (3) For each affected facility for which a determination of equivalency is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.
- (4) Each owner or operator applying for a determination of equivalence to a work practice standard shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.
- e. After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.
- f. An application submitted under this section will be evaluated as set forth in paragraphs (f)(1) and (2) of this section.
- (1) The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the design, equipment, work practice or operational requirements and, if applicable, will consider the commitment in paragraph (d) of this section.
- (2) The Administrator may condition the approval of the alternative means of emission limitation on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as the design, equipment, work practice or operational requirements. (g) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design or operational standard within the meaning of section 111(h)(1) of the CAA.

# 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.

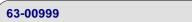
### # 004 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The Owner/Operator shall comply with the following applicable 40 CFR Part 60 Subpart OOOOa demonstration of initial compliance with the standards for reciprocating compressors and collection of fugitive emissions components at a compressor station: (Additional authority for this condition is derived from 40 CFR §60.5410a)

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

- a. N/A
- b. N/A
- 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.
- (1) If complying with §60.5385a(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 §60.5385a(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 §60.5411a(a) and (d).
- (3) You must submit the initial annual report for your reciprocating compressor as required in §60.5420a(b)(1) and (4).
- (4) You must maintain the records as specified in §60.5420a(c)(3) for each reciprocating compressor affected facility.
- d. N/A
- e. N/A



# \*

# **SECTION E.** Source Group Restrictions.

f. N/A
g. N/A
h. N/A
i. N/A
j. To achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, you must comply with paragraphs (j)(1) through (5) of this section.
<ol> <li>You must develop a fugitive emissions monitoring plan as required in §60.5397a(b)(c), and (d).</li> <li>You must conduct an initial monitoring survey as required in §60.5397a(f).</li> <li>You must maintain the records specified in §60.5420a(c)(15).</li> <li>You must repair each identified source of fugitive emissions for each affected facility as required in §60.5397a(h).</li> <li>You must submit the initial annual report for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station compressor station as required in §60.5420a(b)(1) and (7).</li> </ol>
# 005 [25 Pa. Code §127.441]
Operating permit terms and conditions.
The Owner/Operator shall comply with the following applicable 40 CFR Part 60 Subpart OOOOa demonstration of continuous compliance with the standards for reciprocating compressors and collection of fugitive emissions components at a compressor station: (Additional authority for this condition is derived from 40 CFR §60.5415a)
a. N/A
b. N/A
c. For each reciprocating compressor affected facility complying with §60.5385a(a)(1) or (2), you must demonstrate continuous compliance according to paragraphs (c)(1) through (3) of this section. For each reciprocating compressor affected facility complying with §60.5385a(a)(3), you must demonstrate continuous compliance according to paragraph (c)(4) of this section.
(1) You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.  (2) You must submit the annual reports as required in §60.5420a(b)(1) and (4) and maintain records as required in
§60.5420a(c)(3).  (3) You must replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.  (4) You must operate the rod packing emissions collection system under negative pressure and continuously comply with the cover and closed vent requirements in §60.5416a(a) and (b).
d. N/A
e. N/A
f. N/A
g. N/A
h. For each collection of fugitive emissions components at a well site and each collection of fugitive emissions components

at a compressor station, you must demonstrate continuous compliance with the fugitive emission standards specified in

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§60.5397a according to paragraphs (h)(1) through (4) of this section.

(1) You must conduct periodic monitoring surveys as required in §60.5397a(g).



- (2) You must repair or replace each identified source of fugitive emissions as required in §60.5397a(h).
- (3) You must maintain records as specified in §60.5420a(c)(15).
- (4) You must submit annual reports for collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in §60.5420a(b)(1) and (7).

#### 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.

#### # 006 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The Owner/Operator shall comply with the following applicable 40 CFR Part 60 Subpart OOOOa notification, recordkeeping, and reporting requirements: (Additional authority for this condition is derived from 40 CFR §60.5420a)

- 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 §60.5365a that was constructed, modified or reconstructed during the reporting period.
- (1) If you own or operate an affected facility that is the group of all equipment within a process unit at an onshore natural gas processing plant, or a sweetening unit at an onshore natural gas processing plant, you must submit the notifications required in §60.7(a)(1), (3), and (4). If you own or operate a well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, or collection of fugitive emissions components at a well site or collection of fugitive emissions components at a compressor station, you are not required to submit the notifications required in §60.7(a)(1), (3), and (4).
- (2) N/A
- b. Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (8) and (12) of this section and performance test reports as specified in paragraph (b)(9) or (10) of this section, if applicable. You must submit annual reports following the procedure specified in paragraph (b)(11) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (8) 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 for all reports.
- i. The company name, facility site name associated with the affected facility, US Well ID or US Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.
- ii. An identification of each affected facility being included in the annual report.
- iii. Beginning and ending dates of the reporting period.
- iv. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (2) N/A
- (3) N/A
- (4) For each reciprocating compressor affected facility, the information specified in paragraphs (b)(4)(i) and (ii) of this section.



- i. The cumulative number of hours of operation or the number of months since initial startup or since the previous reciprocating compressor rod packing replacement, whichever is later. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.
- ii. Records of deviations specified in paragraph (c)(3)(iii) of this section that occurred during the reporting period.
- (5) N/A
- (6) N/A
- (7) For the collection of fugitive emissions components at each well site and the collection of fugitive emissions components at each compressor station within the company-defined area, the records of each monitoring survey including the information specified in paragraphs (b)(7)(i) through (xii) of this section. For the collection of fugitive emissions components at a compressor station, if a monitoring survey is waived under §60.5397a(g)(5), you must include in your annual report the fact that a monitoring survey was waived and the calendar months that make up the quarterly monitoring period for which the monitoring survey was waived.
- i. Date of the survey.
- ii. Beginning and end time of the survey.
- iii. Name of operator(s) performing survey. If the survey is performed by optical gas imaging, you must note the training and experience of the operator.
- iv. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.
- v. Monitoring instrument used.
- vi. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
- vii. Number and type of components for which fugitive emissions were detected.
- viii. Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h).
- ix. Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.
- x. The date of successful repair of the fugitive emissions component.
- xi. Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.
- xii. Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.
- (8) N/A
- (9) N/A
- (10) N/A
- (11) You must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) You must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §60.4. Once the form has been available in CEDRI for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.
- (12) N/A
- c. Recordkeeping requirements. You must maintain the records identified as specified in §60.7(f) and in paragraphs (c)(1) through (16) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.
- (1) N/A
- (2) N/A



- (3) For each reciprocating compressor affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.
- i. Records of the cumulative number of hours of operation or number of months since initial startup or the previous replacement of the reciprocating compressor rod packing, whichever is later. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.
- ii. Records of the date and time of each reciprocating compressor rod packing replacement, or date of installation of a rod packing emissions collection system and closed vent system as specified in §60.5385a(a)(3).
- iii. Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385a.
- (4) N/A
- (5) N/A
- (6) N/A
- (7) N/A
- (8) N/A
- (9) N/A
- (10) N/A
- (11) N/A
- (12) N/A
- (13) N/A
- (14) N/A
- (15) For each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station, the records identified in paragraphs (c)(15)(i) through (iii) of this section.
- i. The fugitive emissions monitoring plan as required in §60.5397a(b), (c), and (d).
- ii. The records of each monitoring survey as specified in paragraphs (c)(15)(ii)(A) through (I) of this section.
- (A) Date of the survey.
- (B) Beginning and end time of the survey.
- (C) Name of operator(s) performing survey. You must note the training and experience of the operator.
- (D) Monitoring instrument used.
- (E) When optical gas imaging is used to perform the survey, one or more digital photographs or videos, captured from the optical gas imaging instrument used for conduct of monitoring, of each required monitoring survey being performed. The digital photograph must include the date the photograph was taken and the latitude and longitude of the collection of fugitive emissions components at a well site or collection of fugitive emissions components at a compressor station imbedded within or stored with the digital file. As an alternative to imbedded latitude and longitude within the digital file, the digital photograph or video may consist of an image of the monitoring survey being performed with a separately operating GPS device within the same digital picture or video, provided the latitude and longitude output of the GPS unit can be clearly read in the digital image.







- (F) Fugitive emissions component identification when Method 21 is used to perform the monitoring survey.
- (G) Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.
- (H) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
- (I) Documentation of each fugitive emission, including the information specified in paragraphs (c)(15)(ii)(I)(1) through (12) of this section.
- (1) Location.
- (2) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
- (3) Number and type of components for which fugitive emissions were detected.
- (4) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.
- (5) Instrument reading of each fugitive emissions component that requires repair when Method 21 is used for monitoring.
- (6) Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h).
- (7) Number and type of components that were tagged as a result of not being repaired during the monitoring survey when the fugitive emissions were initially found as required in §60.5397a(h)(3)(ii).
- (8) If a fugitive emissions component is not tagged, a digital photograph or video of each fugitive emissions component that could not be repaired during the monitoring survey when the fugitive emissions were initially found as required in §60.5397a(h)(3)(ii). The digital photograph or video must clearly identify the location of the component that must be repaired. Any digital photograph or video required under this paragraph can also be used to meet the requirements under paragraph (c)(15)(ii)(E) of this section, as long as the photograph or video is taken with the optical gas imaging instrument, includes the date and the latitude and longitude are either imbedded or visible in the picture.
- (9) Repair methods applied in each attempt to repair the fugitive emissions components.
- (10) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.
- (11) The date of successful repair of the fugitive emissions component.
- (12) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

iii. N/A

(16) N/A

(17) N/A

# 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.

#### # 007 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Each reciprocating compressor and fugitive emissions component approved to be installed or temporarily operated under this Plan Approval is subject to the requirements under 40 CFR Part 60, Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015. (Additional authority for this condition is derived from 40 CFR §60.5365a)

#### # 008 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The Owner/Operator shall comply with the following applicable 40 CFR Part 60 Subpart OOOOa timelines: (Additional authority for this condition is derived from 40 CFR §60.5370a)

- a. You must be in compliance with the standards of this subpart no later than August 2, 2016 or upon startup, whichever is later.
- b. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution





control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart.

c. N/A

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall comply with the applicable General Provisions in 40 CFR §§60.1 through 60.19 as identified in Table 3 to 40 CFR Part 60 Subpart OOOOa. (Additional authority for this condition is derived from 40 CFR §60.5425a).

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

All terms used in 40 CFR Part 60 Subpart OOOOa shall have the meaning given in 40 CFR §60.5430a or else in the Clean Air Act and 40 CFR Part 60 Subpart A. (Additional authority for this condition is derived from 40 CFR §60.5430a)







Group Name: G05

Group Description: NESHAP HH TEG Dehydrators

Sources included in this group

ID	Name
201	DEHYDRATOR #1 (200 MMSCFD)
202	DEHYDRATOR #2 (200 MMSCFD)
203	DEHYDRATOR #3 (200 MMSCFD)
204	DEHYDRATOR #4 (200 MMSCFD)

#### I. RESTRICTIONS.

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

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

### # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.772]

Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities Test methods, compliance procedures, and compliance demonstrations.

The Owner/Operator shall comply with the following applicable 40 CFR Part 63 Subpart HH test methods, compliance procedures, and compliance demonstrations:

- a. N/A
- b. Determination of glycol dehydration unit flowrate, benzene emissions, or BTEX emissions. The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit natural gas flowrate, benzene emissions, or BTEX emissions.
- (1) The determination of actual flowrate of natural gas to a glycol dehydration unit shall be made using the procedures of either paragraph (b)(1)(i) or (b)(1)(ii) of this section.
- i. The owner or operator shall install and operate a monitoring instrument that directly measures natural gas flowrate to the glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The owner or operator shall convert annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.
- ii. The owner or operator shall document, to the Administrator's satisfaction, the actual annual average natural gas flowrate to the glycol dehydration unit.
- (2) The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (b)(2)(i) or (ii) of this section. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.
- i. The owner or operator shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or
- ii. The owner or operator shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in §63.772(a)(1)(i) or (ii), or an alternative method according to §63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.
- c. N/A
- d. N/A





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e. N/A			
f. N/A			
g. N/A			
h. N/A			
i. N/A			

#### RECORDKEEPING REQUIREMENTS. IV.

#### # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.774]

Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities Recordkeeping requirements.

The Owner/Operator shall comply with the following applicable 40 CFR Part 63 Subpart HH recordkeeping requirements:

- a. The recordkeeping provisions of 40 CFR part 63, subpart A, that apply and those that do not apply to owners and operators of sources subject to this subpart are listed in Table 2 of this subpart.
- b. N/A
- c. N/A

d.

- (1) An owner or operator of a glycol dehydration unit that meets the exemption criteria in §63.764(e)(1)(i) or §63.764(e)(1)(ii) shall maintain the records specified in paragraph (d)(1)(i) or paragraph (d)(1)(ii) of this section, as appropriate, for that glycol dehydration unit.
- i. The actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) as determined in accordance with §63.772(b)(1), or
- ii. The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with §63.772(b)(2).
- (2) N/A
- e. N/A
- f. N/A
- g. The owner or operator of an affected source subject to this subpart shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The owner or operator shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.764(j), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- h. N/A
- i. N/A

# V. REPORTING REQUIREMENTS.

#### [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.775]

Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities Reporting requirements.

The Owner/Operator shall comply with the following applicable 40 CFR Part 63 Subpart HH reporting requirements:

- a. The reporting provisions of subpart A of this part, that apply and those that do not apply to owners and operators of sources subject to this subpart are listed in Table 2 of this subpart.
- b. N/A
- c. N/A
- d. Each owner or operator of a source subject to this subpart shall submit a Notification of Compliance Status Report as required under §63.9(h) within 180 days after the compliance date specified in §63.760(f). In addition to the information required under §63.9(h), the Notification of Compliance Status Report shall include the information specified in paragraphs (d)(1) through (12) of this section. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If all of the information required under this paragraph has been submitted at any time prior to 180 days after the applicable compliance dates specified in §63.760(f), a separate Notification of Compliance Status Report is not required. If an owner or operator submits the information specified in paragraphs (d)(1) through (12) of this section at different times, and/or different submittals,





subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information.

- (1) N/A
- (2) N/A
- (3) N/A
- (4) N/A
- (5) N/A
- (6) N/A
- (7) N/A
- (8) N/A
- (9) The owner or operator shall submit the analysis performed under §63.760(a)(1).
- (10) The owner or operator shall submit a statement as to whether the source has complied with the requirements of this subpart.
- (11) N/A
- (12) N/A
- (13) N/A
- (14) N/A
- e. N/A
- f. Notification of process change. Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the owner or operator shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report as required under paragraph (e) of this section, whichever is sooner. The report shall include:
- (1) A brief description of the process change;
- (2) A description of any modification to standard procedures or quality assurance procedures;
- (3) Revisions to any of the information reported in the original Notification of Compliance Status Report under paragraph (d) of this section; and
- (4) Information required by the Notification of Compliance Status Report under paragraph (d) of this section for changes involving the addition of processes or equipment.
- (1) N/A
- (2) All reports required by this subpart not subject to the requirements in paragraph (g)(1) of this section must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraph (g)(1) of this section in paper format.

#### VI. WORK PRACTICE REQUIREMENTS.

# [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.

The Owner/Operator shall comply with the following applicable 40 CFR Part 63 Subpart HH 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. N/A
- d. N/A
- 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) N/A

f. N/A

g. N/A

h. N/A

i. N/A

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.

#### VII. ADDITIONAL REQUIREMENTS.

# # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.760]

Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities Applicability and designation of affected source.

Each tri ethylene glycol dehydrator approved to be installed or temporarily operated under this Plan Approval (Source IDs 201-204) is subject to 40 CFR Part 63, Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.

# # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.761]

Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities Definitions.

All terms used in 40 CFR Part 63 Subpart HH shall have the meaning given in 40 CFR §63.761 or else in the Clean Air Act and 40 CFR Part 63 Subpart A.

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Group Name: G06

Group Description: NESHAP ZZZZ Stationary RICE (Non-emergency)

Sources included in this group

ID	Name
101	3550 BHP, CAT G3612 COMPRESSOR ENG #1, SN BKE00792
102	3550 BHP, CAT G3612 COMPRESSOR ENG #2, SN BKE00790
103	3550 BHP, CAT G3612 COMPRESSOR ENG #3, SN BKE00791
104	3550 BHP, CAT G3612 COMPRESSOR ENG #4, SN BKE00788
105	3550 BHP, CAT G3612 COMPRESSOR ENG #5, SN BKE00785
106	3550 BHP, CAT G3612 COMPRESSOR ENG #6, SN BKE00799
107	5000 BHP, CAT G3616 ENG #7, SN ZZY00158
108	5000 BHP, CAT G3616 ENG #8, SN ZZY00703
109	5000 BHP, CAT G3616 ENG #9, SN ZZY00701
110	5000 BHP, CAT G3616 ENG #10, SN ZZY00704

#### 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 63.6585]

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

### Am I subject to this subpart?

Each Caterpillar G3612 A3 and G3616 A4 compressor engine approved to be installed and operating under this state-only operating permit (Source IDs 101-110) is subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

### # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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



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# **SECTION E.** Source Group Restrictions.

# What parts of my plant does this subpart cover?

Each Caterpillar G3612 A3 and G3616 A4 compressor engine approved to be installed or operated under this state-only operating permit (Source IDs 101-110) is classified as a New stationary RICE located at an area source of HAP emissions. Each engine must meet the requirements of 40 CFR Part 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart JJJJ. No further requirements apply for these engines under 40 CFR Part 63 Subpart ZZZZ.

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# **SECTION E.** Source Group Restrictions.

Group Name: G07

Group Description: TEG Dehydrators

Sources included in this group

ID	Name
201	DEHYDRATOR #1 (200 MMSCFD)
202	DEHYDRATOR #2 (200 MMSCFD)
203	DEHYDRATOR #3 (200 MMSCFD)
204	DEHYDRATOR #4 (200 MMSCFD)

#### I. RESTRICTIONS.

### **Emission Restriction(s).**

# # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from each enclosed flare shall not exceed 0% opacity except for a total of five minutes during any consecutive two-hour period.

# Control Device Efficiency Restriction(s).

# # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from each tri ethylene glycol dehydrator still vent and flash tank shall be captured and controlled by at least 98% by enclosed flare.

#### II. TESTING REQUIREMENTS.

### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Owner/Operator shall demonstrate compliance with the 98% destruction efficiency requirement as follows:

- a. Install enclosed flares that have been tested and demonstrated by the manufacturer to achieve 98% destruction efficiency, and operate and maintain those enclosed flares in accordance with manufacturer's specifications;
- b. Conduct performance testing upon each enclosed flare at the Facility within 180 days of installation of each enclosed flare or on an alternative schedule as approved by the Department. Subsequent performance testing shall be conducted at a minimum of once every 5 years thereafter; or
- c. Conduct performance testing upon each enclosed flare at the Facility within 180 days of installation of each enclosed flare or on an alternative schedule as approved by the Department. Monitor and record the operating temperature of each enclosed flare at a minimum of fifteen (15) minute intervals during each test run in order to establish a minimum effective operating temperature of each enclosed flare. Install and operate temperature monitoring devices on each enclosed flare with a continuous recorder that indicates the continuous operating temperature of each enclosed flare. Maintain operating temperature above the minimum demonstrated during performance testing to achieve a minimum 98% destruction efficiency.

# # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The owner or operator must conduct performance tests within 180 days of each reauthorization unless:

- (A) The combustion control device is a manufacturer-tested model tested in accordance with 40 CFR §60.5413(d) or §60.5413a(d);
- (B) A performance test conducted on a device of the same make and model in similar service at another facility within the Commonwealth approved by the Department may be used to satisfy this requirement;
- (C) The Department uses EPA's National Stack Testing Guidance for stack test waivers. or
- (D) The combustion control device established a correlation between the outlet TOC performance level and the firebox or combustion chamber temperature during the initial performance test.

The owner or operator of any combustion control device that is a manufacturer tested model shall meet the requirements of 40 CFR §60.5413(e) or §60.5413a(e) as applicable.





# # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

If conducting a performance test, the owner or operator must submit the test protocol described in Section C for review and approval. The owner or operator should conduct the following test procedures:

- (a) Conduct three test runs of at least one-hour duration while operating the control device within 5% of the required operating temperature.
- (b) Select the sampling port location and the number and location of traverse points at the exhaust using 40 CFR Part 60, Appendix A-1, Method 1 or 1A depending on stack diameter.
- (i) If demonstrating compliance with a percent reduction requirement, sampling sites must be located at the inlet of the first control device and the outlet of the final control device; or
- (ii) If demonstrating compliance with an outlet concentration requirement, the sampling site must be located at the outlet of the control device.
- (c) Determine the effluent characteristics including:
- (i) The flow velocity, stack temperature, static pressure, and barometric pressure using 40 CFR Part 60, Appendix A-1, Method 2 or 2C depending on stack diameter;
- (ii) The gas density using 40 CFR Part 60, Appendix A-2, Method 3A; and
- (iii) The moisture content using 40 CFR Part 60, Appendix A-3, Method 4.
- (d) To demonstrate compliance with (b)(i), use 40 CFR Part 60, Appendix A-7, Method 25A to determine the Total Organic Compounds (TOC) and then convert to dry basis using the moisture content from (c)(iii) above and calculate the inlet and outlet mass rates as propane and the percent reduction.
- (e) To demonstrate compliance with (b)(ii), use 40 CFR Part 60, Appendix A-7, Method 25A to determine the TOC and 40 CFR Part 60, Appendix A-6, Method 18 to determine the methane and ethane concentration, and then correct the TOC concentration, minus methane and ethane, for percent oxygen from (c)(ii) above.

#### III. MONITORING REQUIREMENTS.

# # 006 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The Owner/Operator shall install and operate a heat sensing monitoring device on each enclosed flare with a continuous recorder that indicates the continuous ignition of the pilot flame.

#### IV. RECORDKEEPING REQUIREMENTS.

#### # 007 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

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

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

#### V. REPORTING REQUIREMENTS.

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





### VI. WORK PRACTICE REQUIREMENTS.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

Each enclosed flare shall be operated at all times while each controlled tri ethylene glycol dehydrator is operated.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner or operator of an enclosed flare or other enclosed combustion control device shall meet the requirements of 40 CFR §60.5412(d)(1) and §60.5415(e) or 40 CFR §60.5412a(d)(1) and § 60.5415a(e) as applicable.

### VII. ADDITIONAL REQUIREMENTS.

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



# 63-00999



# **SECTION E.** Source Group Restrictions.

Group Name: G08

Group Description: Emergency Generator Engines

Sources included in this group

ID	Name
151	EMERGENCY DIESEL-FIRED ENGINE #1 (1220 BHP)
152	EMERGENCY DIESEL-FIRED ENGINE #2 (1220 BHP)

#### I. RESTRICTIONS.

# **Emission Restriction(s).**

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

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) N/A
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:
- (i) Manufactured after April 1, 2006 and are not fire pump engines, or
- (ii) N/A
- (3) N/A
- (b) (d) N/A
- (e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.
- # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal cor

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

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]

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

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

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





### # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to

- (a) N/A
- (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- (c) (e) N/A

# **Operation Hours Restriction(s).**

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Operation of each Cummins QSK23-G7 emergency generator engine shall not exceed 250 hours in any consecutive 12-month period.

#### 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.

# # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the hours of operation of each emergency generator engine at this facility for emergency and non-emergency use.

# # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

- (a) N/A
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- (c) N/A
- (d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d(1) through (3) of this section.
- (1) The report must contain the following information:





- (i) Company name and address where the engine is located.
- (ii) Date of the report and beginning and ending dates of the reporting period.
- (iii) Engine site rating and model year.
- (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v)-(vi) [Reserved]
- (vii) Hours spent for operation for the purposes specified in  $\S$  60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in  $\S$  60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4. Beginning on February 26, 2025, submit annual report electronically according to paragraph (g) of this section.
- (e) (j) N/A

#### 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.

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

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

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

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:
- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR part 1068, as they apply to you.
- (b) (e) N/A
- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in





non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for the purpose specified in paragraph (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

### (ii)-(iii) [Reserved]

- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

### (ii) [Reserved]

- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
- (1) (2) Not applicable.
- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in





accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(h) N/A

#### VII. ADDITIONAL REQUIREMENTS.

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

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

#### # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- (1) N/A
- (2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
- (ii) N/A
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (3) N/A
- (b) N/A
- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IJII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
- (1) A new or reconstructed stationary RICE located at an area source;
- (2) (7) N/A

 $[69\ FR\ 33506, June\ 15, 2004, as\ amended\ at\ 73\ FR\ 3604, Jan.\ 18, 2008; 75\ FR\ 9674, Mar.\ 3, 2010; 75\ FR\ 37733, June\ 30, 2010; 75\ FR\ 51588, Aug.\ 20, 2010; 78\ FR\ 6700, Jan.\ 30, 2013]$ 





# **SECTION F.** Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.





# **SECTION G.** Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



# 63-00999



### SECTION H. Miscellaneous.

EQM Gathering OPCO, LLC is granted authorization to continue operating the following sources:

- Sources 101-106, six (6) 3,550-HP Caterpillar G3612 A3 compressor engines controlled by oxidation catalysts;
- Sources 107-110, four (4) 5,000-HP Caterpillar G3616 A4 compressor engines controlled by SCRs;
- Sources 151-152, two (2) 1,220-HP Cummins QAK23-G7 NR2 emergency diesel-fired engines;
- Sources 201-204, four (4) 200 MMscfd dehydration units each controlled by its own 7.0 MMBtu/hr Envirotherm TVO-48 thermal oxidizer rated at 98% destruction efficiency for VOCs, HAP, and CH4;
- Source 301, fugitive emission components such as valves, flanges, open-ended lines, etc.
- Source 401, Heaters/Reboilers, which includes four (4) Exterran FAH40/18-20 reboilers associated with each dehydration unit rated at 3.08 MMBtu/hr each;

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- Source 501, Storage Tanks/Vessels of various capacities as well as truck loadout;
- Source 601, Pneumatic Devices, all of which are air-actuated and have no anticipated emissions;
- Source 701, Venting/Blowdowns;
- Source 702, Crankcase Vents;
- Source 703, Rod Packing;
- Source 801, Pigging Operations; and
- Miscellaneous storage tanks.

DEP Auth ID: 1454404 DEP PF ID: 785708





\*\*\*\*\* End of Report \*\*\*\*\*