



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY NATURAL MINOR OPERATING PERMIT

Issue Date: January 25, 2024

Effective Date: May 15, 2025

Revision Date: May 15, 2025

Expiration Date: December 31, 2028

Revision Type: Amendment

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

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

State Only Permit No: 10-00381

Natural Minor

Federal Tax Id - Plant Code: 26-2938747-28

Owner Information

Name: MTN GATHERING LLC

Mailing Address: 190 THORN HILL RD
WARRENDALE, PA 15086-7528

Plant Information

Plant: MTN GATHERING LLC/FORWARD COMP STA

Location: 10 Butler County 10928 Forward Township

SIC Code: 1311 Mining - Crude Petroleum And Natural Gas

Responsible Official

Name: IAN KEPHART

Title: ASSET MANAGER

Phone: (724) 772 - 3500

Email: ian.kephart@exxonmobil.com

Permit Contact Person

Name: MELISSA BREITENBACH

Title: REGULATORY LEAD

Phone: (724) 831 - 9291

Email: melissa.breitenbach@exxonmobil.com

[Signature] _____

LORI L. MCNABB, NORTHWEST REGION AIR PROGRAM MANAGER



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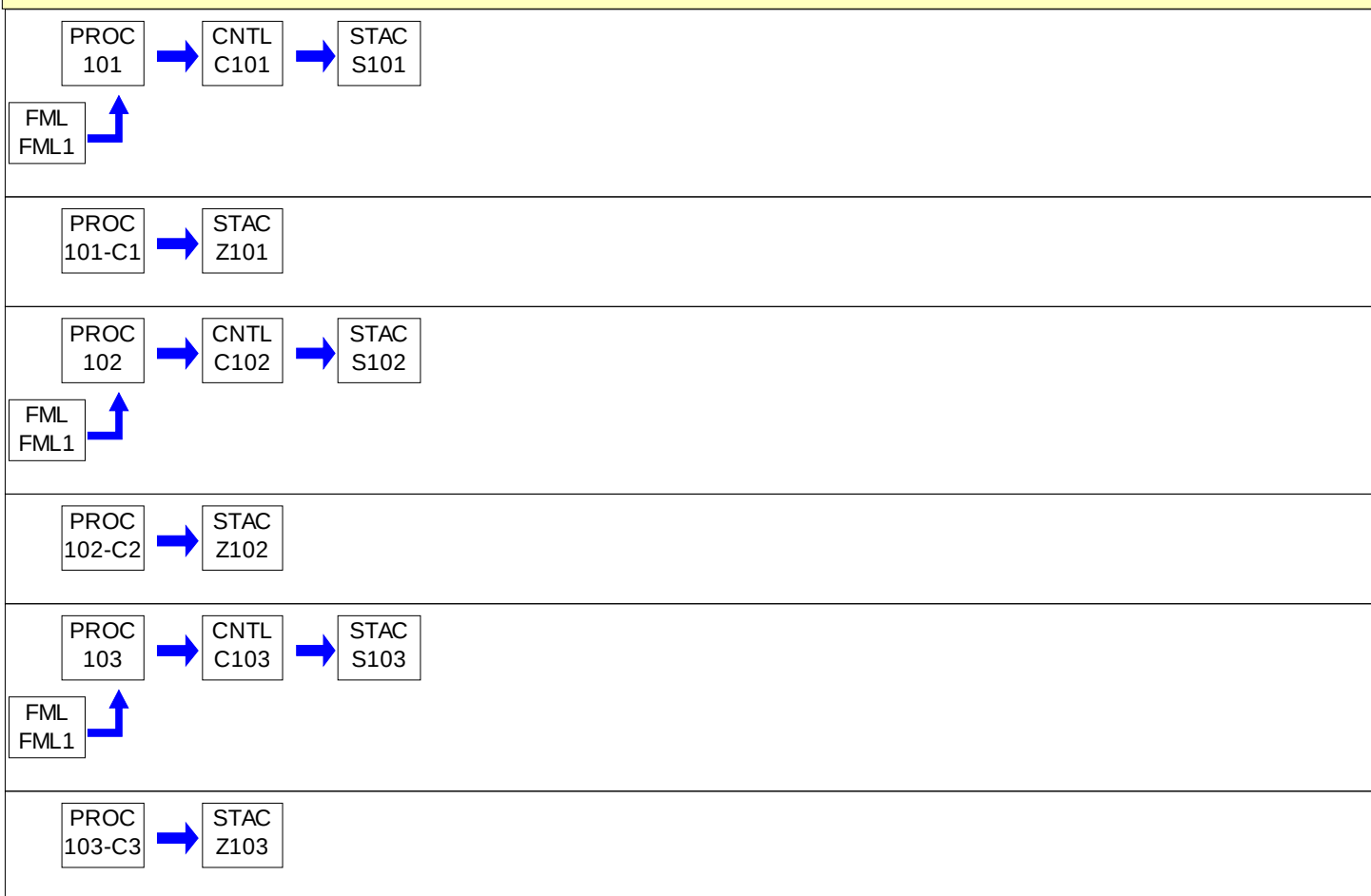
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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	1775 BHP, CAT G3606TA, COMP ENG C-1, SN 4ZS01658	13.410 MCF/HR	Natural Gas
101-C1	COMPRESSOR C-1 ARIEL JGC-4 SN. F-38850	625.000 MCF/HR	NATURAL GAS
102	1775 BHP, CAT G3606TA, COMP ENG C-2, SN 4ZS01663	13.410 MCF/HR	Natural Gas
102-C2	COMPRESSOR C-2 ARIEL JGC-4 SN. F-38662	625.000 MCF/HR	NATURAL GAS
103	1775 BHP, CAT G3606TA, COMP ENG C-3, SN 4ZS01690	13.410 MCF/HR	Natural Gas
103-C3	COMPRESSOR C-3 ARIEL JGC-4 SN. F-39042	625.000 MCF/HR	NATURAL GAS
104	1775 BHP, CAT G3606TA, COMP ENG C-4, SN 4ZS00521	13.410 MCF/HR	Natural Gas
104-C4	COMPRESSOR C-4 ARIEL JGC-4 SN. F-22245	625.000 MCF/HR	NATURAL GAS
105	1775 BHP, CAT G3606TA, COMP ENG C-5, SN 4ZS00527	13.410 MCF/HR	Natural Gas
105-C5	COMPRESSOR C-5 ARIEL JGC-4 SN. F-22484	625.000 MCF/HR	NATURAL GAS
106	1775 BHP, CAT G3606TA, COMP ENG C-6, SN 4ZS01155	13.410 MCF/HR	Natural Gas
106-C6	COMPRESSOR C-6 ARIEL JGC-4 SN. F-31649	625.000 MCF/HR	NATURAL GAS
201	HEATERS/REBOILERS; H-1, H-2, H-3, AND RBDEHY1	3.250 MMBTU/HR	
		4.750 MCF/HR	NATURAL GAS
301	STORAGE TANKS & GUN BARREL (T-002, T-003, T-004, & T-001)	0.270 Lbs/HR	NATURAL GAS
401	TEG DEHYDRATOR 104 MILLION SCFD	4.333 MMCF/HR	Natural Gas
501	PNEUMATIC DEVICES	1.000 MCF/HR	Natural Gas
601	VENTING/BLOWDOWNS	8.000 MCF/HR	Natural Gas
701	FUGITIVES FROM COMPONENT LEAKS	5.000 MMCF/HR	Natural Gas
801	PIGGING OPERATIONS	383.000 CF/HR	Natural Gas
910	L-001, TRUCK LOAD OUT OPERATIONS FOR CONDENSATE	1.758 BBL/HR	CONDENSATE
920	L-002, TRUCK LOAD OUT OPERATIONS FOR PRODUCED WATER	1.136 BBL/HR	PRODUCED WATER
C101	ENGINE C-1 OXIDATION CATALYST		
C102	ENGINE C-2 OXIDATION CATALYST		
C103	ENGINE C-3 OXIDATION CATALYST		
C104	ENGINE C-4 OXIDATION CATALYST		
C105	ENGINE C-5 OXIDATION CATALYST		
C106	ENGINE C-6 OXIDATION CATALYST		
C301	FLARE (FL-1)		
C401	BTEX CONDENSER FOR TEG DEHYDRATOR		
FML1	NATURAL GAS		
S101	ENGINE C-1 EMISSION POINT		
S102	ENGINE C-2 EMISSION POINT		
S103	ENGINE C-3 EMISSION POINT		
S104	ENGINE C-4 EMISSION POINT		
S105	ENGINE C-5 EMISSION POINT		
S106	ENGINE C-6 EMISSION POINT		

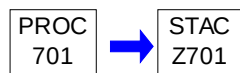
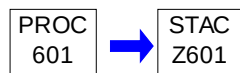
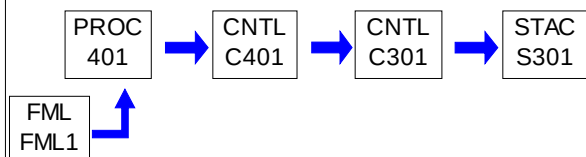
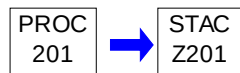
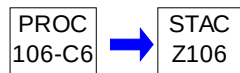
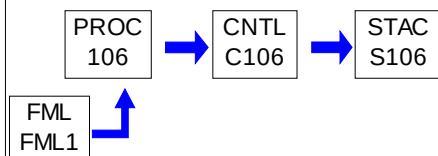
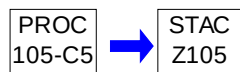
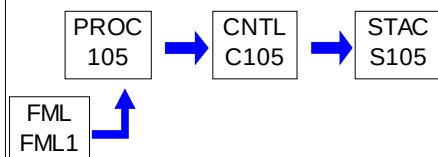
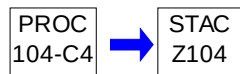
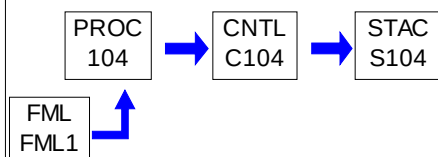
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S301	PROCESS TANKS EMISSION POINT		
Z101	COMPRESSOR C-1 FUGITIVE EMISSION POINTS		
Z102	COMPRESSOR C-2 FUGITIVE EMISSION POINTS		
Z103	COMPRESSOR C-3 FUGITIVE EMISSION POINTS		
Z104	COMPRESSOR C-4 FUGITIVE EMISSION POINTS		
Z105	COMPRESSOR C-5 FUGITIVE EMISSION POINTS		
Z106	COMPRESSOR C-6 FUGITIVE EMISSION POINTS		
Z201	HEATERS/REBOILERS EMISSION POINTS		
Z601	VENTING/BLOWDOWNS FUGITIVE EMISSION POINTS		
Z701	COMPONENT LEAKS FUGITIVE EMISSION POINTS		
Z801	PIGGING OPERATIONS EMISSION POINTS		
Z910	FUGITIVES FROM L-001 TRUCK LOAD OUT OF CONDENSATE		
Z920	FUGITIVES FROM L-002, TRUCK LOAD OUT OF PRODUCED WATER		

PERMIT MAPS



PERMIT MAPS



**PERMIT MAPS**

PROC
801 → STAC
Z801

PROC
910 → STAC
Z910

PROC
920 → STAC
Z920

**SECTION B. General State Only Requirements****#001 [25 Pa. Code § 121.1]****Definitions.**

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

#002 [25 Pa. Code § 127.446]**Operating Permit Duration.**

- (a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.
- (b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

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

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]**Operating Permit Fees under Subchapter I.**

- (a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.
 - (1) For a synthetic minor facility, a fee equal to:
 - (i) Four thousand dollars (\$4,000) for calendar years 2021—2025.
 - (ii) Five thousand dollars (\$5,000) for calendar years 2026—2030.
 - (iii) Six thousand three hundred dollars (\$6,300) for the calendar years beginning with 2031.

**SECTION B. General State Only Requirements**

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

- (i) Two thousand dollars (\$2,000) for calendar years 2021—2025.
- (ii) Two thousand five hundred dollars (\$2,500) for calendar years 2026—2030.
- (iii) Three thousand one hundred dollars (\$3,100) for the calendar years beginning with 2031.

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

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]**Transfer of Operating Permits.**

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

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

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

#008 [25 Pa. Code § 127.441]**Need to Halt or Reduce Activity Not a Defense.**

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

#009 [25 Pa. Code §§ 127.442(a) & 127.461]**Duty to Provide Information.**

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

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

#010 [25 Pa. Code § 127.461]**Revising an Operating Permit for Cause.**

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

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450, 127.462, 127.465 & 127.703]**Operating Permit Modifications**

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

**SECTION B. General State Only Requirements**

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

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

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

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

#012 [25 Pa. Code § 127.441]**Severability Clause.**

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

#013 [25 Pa. Code § 127.449]**De Minimis Emission Increases.**

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

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

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

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

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

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

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x 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:

**SECTION B. General State Only Requirements**

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

#014 [25 Pa. Code § 127.3]**Operational Flexibility.**

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

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

**SECTION B. General State Only Requirements**

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

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

#015 [25 Pa. Code § 127.11a]**Reactivation of Sources**

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

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

#016 [25 Pa. Code § 127.36]**Health Risk-based Emission Standards and Operating Practice Requirements.**

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

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

#017 [25 Pa. Code § 121.9]**Circumvention.**

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

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

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

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

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

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

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

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

**SECTION B. General State Only Requirements**

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

#019 [25 Pa. Code §§ 127.441(c) & 135.5]**Sampling, Testing and Monitoring Procedures.**

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

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

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

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

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

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

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

#021 [25 Pa. Code § 127.441(a)]**Property Rights.**

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

#022 [25 Pa. Code § 127.447]**Alternative Operating Scenarios.**

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

**SECTION B. General State Only Requirements****#023 [25 Pa. Code §135.3]****Reporting**

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

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

#024 [25 Pa. Code §135.4]**Report Format**

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

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

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

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

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

(1) Construction or demolition of buildings or structures.

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

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

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) [Not applicable]

(8) [Not applicable]

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

(i) the emissions are of minor significance with respect to causing air pollution; and

(ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

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

(c) [Paragraph (c) of the regulation is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]

(d) [Paragraph (d) of the regulation is not applicable to this facility.]

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 25 Pa. Code § 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) [Condition #002 above] if such emissions are visible at the point the emissions pass outside the person's property.

**SECTION C. Site Level Requirements****# 004 [25 Pa. Code §123.31]****Limitations**

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.

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

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

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

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

The limitations of 25 Pa. Code § 123.41 (relating to limitations) [Condition #005 above] shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 25 Pa. Code § 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions). [123.1(a)(1) -- (9) are printed under Emission Restrictions of Condition #002 in this section of permit.]
- (4) [Not applicable]

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

This facility will be limited to VOC emissions of 49.0 tons per year as a 12-month rolling total.

[From plan approval 10-00381C, Section C, Condition # 001.]

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

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with applicable restrictions.

[From plan approval 10-381B, Section C, Condition # 008.]

III. MONITORING REQUIREMENTS.**# 009 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

**SECTION C. Site Level Requirements****# 010 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

- (a) The owner or operator of the facility shall, at a minimum, on a monthly basis perform a leak detection and repair program that includes audible, visual, and olfactory (AVO) inspections.
- (b) Within 180 days after the issuance of this plan approval the owner or operator of the facility shall at a minimum, on a quarterly basis, use forward looking infrared (FLIR) cameras or other leak detection monitoring devices approved by the Department for the detection of fugitive leaks. The Department may grant an extension for use of FLIR camera upon receipt of a written request from the owner or operator of the facility documenting the justification for the requested extension.
- (c) If any leak is detected, the owner or operator of the facility shall repair the leak as expeditiously as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in 40 CFR §§ 60.482-60.489 or 25 Pa. Code 129.127(l)(1). The owner or operator shall record each leak detected and the associated repair activity. The records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

[From plan approval 10-00381C, Section C, Condition # 002.]

IV. RECORDKEEPING REQUIREMENTS.**# 011 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The facility shall maintain site wide emissions calculations records on a 12-month rolling basis and make them available to the Department upon request. The records shall be maintained for a five year period.

[From plan approval 10-00381C, Section C, Condition # 003.]

012 [25 Pa. Code §135.4]**Report format**

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

013 [25 Pa. Code §135.5]**Recordkeeping**

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

V. REPORTING REQUIREMENTS.**# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Malfunction reporting shall be conducted as follows:

- (a) For purpose of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or source to operate in a normal or usual manner that may result in an increase in the emission of air contaminants. Examples of malfunctions may include, but are not limited to: large dust plumes, heavy smoke, a spill or release that results in a malodor that is detectable outside the property of the person on whose land the source is being operated.
- (b) When the malfunction poses an imminent and substantial danger to the public health and safety or the environment, the notification shall be submitted to the Department no later than one hour after the incident is discovered.

**SECTION C. Site Level Requirements**

(c) All other malfunctions that must be reported under subsection (a) shall be reported to the Department no later than the next business day.

(d) The report shall describe the:

- (1) Name and location of the facility;
- (2) Nature and cause of the malfunction or breakdown;
- (3) Time when the malfunction or breakdown was first observed;
- (4) Expected duration of excess emissions; and
- (5) Estimated rate of emissions.

(e) Malfunctions shall be reported to the Department at the following address:

PA DEP
Office of Air Quality
230 Chestnut Street
Meadville, PA 16335
814-332-6945

(f) The owner or operator shall notify the Department within 24 hours or next business day upon completion when corrective measures have been accomplished.

(g) Subsequent to the malfunction, the owner/operator shall submit a full written report to the Department including the items identified in (d) and corrective measures taken on the malfunction within 15 days, if requested. The written report shall be submitted electronically at the following web address. <https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) Annual emission statements are due by March 1 for the preceding calendar year.

(b) Instructions for electronic submittal of annual emissions inventory are available from the Pennsylvania Department of Environmental Protection website at the following web address.

<http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=1441416&DocName=INSTRUCTIONS%20FOR%20SUBMITTING%20AIR%20QUALITY%20EMISSION%20INVENTORY.PDF%20%20%3Cspan%20style%3D%22color%3Agreen%3B%22%3E%3C%2Fspan%3E%20%3Cspan%20style%3D%22color%3Ablue%3B%22%3E%3C%2Fspan%3E%20%2F8%2F2021>

If the link above is broken, the INSTRUCTIONS FOR SUBMITTING AIR QUALITY EMISSION INVENTORY REPORTS, Document # 2700-BK-DEP1936, will be available in the Air Quality Publications eLibrary at this web address:

<https://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4094>

[Authority for this condition is derived from 25 Pa. Code § 135.21.]

016 [25 Pa. Code §135.3]**Reporting**

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

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial

**SECTION C. Site Level Requirements**

source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

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

VI. WORK PRACTICE REQUIREMENTS.**# 017 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(a) - (b) [Paragraphs (a) and (b) of 25 Pa. Code § 123.1 are printed under Emission Restrictions in this section of permit.]

(c) A person responsible for any source specified in 25 Pa. Code § 123.1(a)(1) -- (7) or (9) [Condition 002 above] 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.

(d) [Paragraph (d) of the regulation is not applicable to this facility.]

018 [25 Pa. Code §129.14]**Open burning operations**

(a) Air basins. [Paragraph (a) of the regulation is not applicable to this facility.]

(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.

**SECTION C. Site Level Requirements**

(4) [Not applicable]

(5) [Not applicable]

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

(7) A fire set solely for cooking food.

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

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

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

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

(2) [Not applicable]

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

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

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

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

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

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.

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: 1775 BHP, CAT G3606TA, COMP ENG C-1, SN 4ZS01658

Source Capacity/Throughput:

13.410 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: 1 - ALL COMPRESSOR ENGINES
2 - NEW COMPRESSOR ENGINES - JJJJ

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

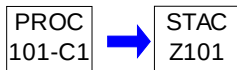
**SECTION D. Source Level Requirements**

Source ID: 101-C1

Source Name: COMPRESSOR C-1 ARIEL JGC-4 SN. F-38850

Source Capacity/Throughput: 625.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 4 - FEDERAL STDS 60-0000
5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 102

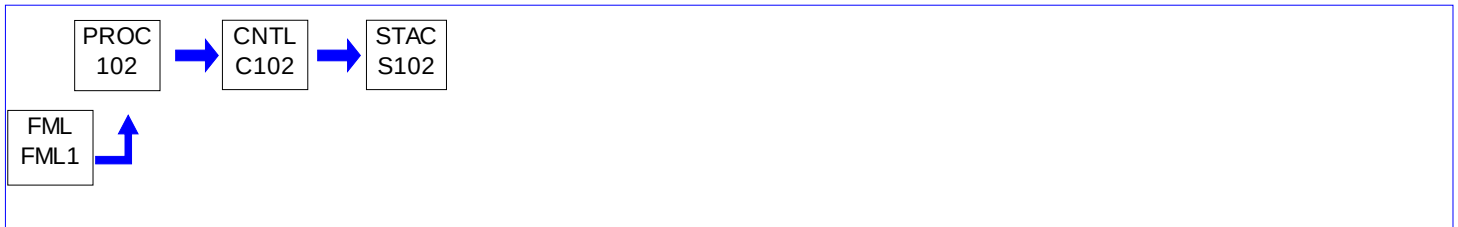
Source Name: 1775 BHP, CAT G3606TA, COMP ENG C-2, SN 4ZS01663

Source Capacity/Throughput:

13.410 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: 1 - ALL COMPRESSOR ENGINES
2 - NEW COMPRESSOR ENGINES - JJJJ

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

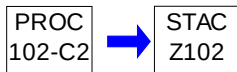
**SECTION D. Source Level Requirements**

Source ID: 102-C2

Source Name: COMPRESSOR C-2 ARIEL JGC-4 SN. F-38662

Source Capacity/Throughput: 625.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 4 - FEDERAL STDS 60-0000
5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: 1775 BHP, CAT G3606TA, COMP ENG C-3, SN 4ZS01690

Source Capacity/Throughput: 13.410 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 1 - ALL COMPRESSOR ENGINES
2 - NEW COMPRESSOR ENGINES - JJJJ

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

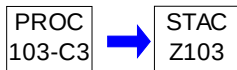
**SECTION D. Source Level Requirements**

Source ID: 103-C3

Source Name: COMPRESSOR C-3 ARIEL JGC-4 SN. F-39042

Source Capacity/Throughput: 625.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 4 - FEDERAL STDS 60-0000
5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

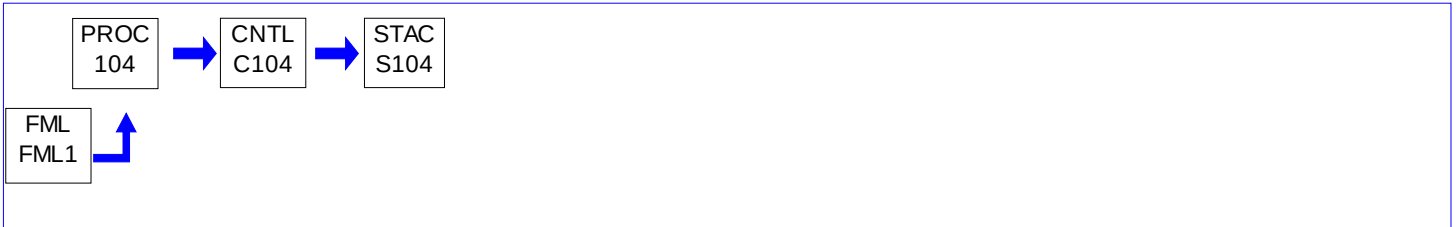
**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: 1775 BHP, CAT G3606TA, COMP ENG C-4, SN 4ZS00521

Source Capacity/Throughput: 13.410 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 1 - ALL COMPRESSOR ENGINES
3 - EXISTING COMPRESSOR ENGINES - ZZZZ

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

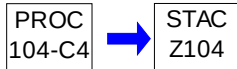
**SECTION D. Source Level Requirements**

Source ID: 104-C4

Source Name: COMPRESSOR C-4 ARIEL JGC-4 SN. F-22245

Source Capacity/Throughput: 625.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 105

Source Name: 1775 BHP, CAT G3606TA, COMP ENG C-5, SN 4ZS00527

Source Capacity/Throughput: 13.410 MCF/HR Natural Gas

Conditions for this source occur in the following groups: 1 - ALL COMPRESSOR ENGINES
3 - EXISTING COMPRESSOR ENGINES - ZZZZ

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

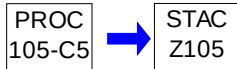
**SECTION D. Source Level Requirements**

Source ID: 105-C5

Source Name: COMPRESSOR C-5 ARIEL JGC-4 SN. F-22484

Source Capacity/Throughput: 625.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 106

Source Name: 1775 BHP, CAT G3606TA, COMP ENG C-6, SN 4ZS01155

Source Capacity/Throughput:

13.410 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: 1 - ALL COMPRESSOR ENGINES
2 - NEW COMPRESSOR ENGINES - JJJJ

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

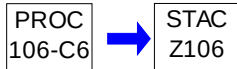
**SECTION D. Source Level Requirements**

Source ID: 106-C6

Source Name: COMPRESSOR C-6 ARIEL JGC-4 SN. F-31649

Source Capacity/Throughput: 625.000 MCF/HR NATURAL GAS

Conditions for this source occur in the following groups: 5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 201

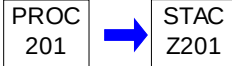
Source Name: HEATERS/REBOILERS; H-1, H-2, H-3, AND RBDEHY1

Source Capacity/Throughput:

3.250 MMBTU/HR

4.750 MCF/HR

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.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

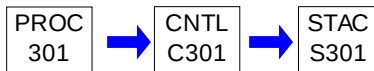
Source ID: 301

Source Name: STORAGE TANKS & GUN BARREL (T-002, T-003, T-004, & T-001)

Source Capacity/Throughput:

0.270 Lbs/HR

NATURAL GAS

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

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

- (a) Vasquez-Beggs Equation (VBE)
- (b) Environmental Consultants and Research, Inc. (EC/R) Equation
- (c) An equation of state (EOS) calculation program such as E&P Tank®
- (d) Determination of the gas oil ratio (GOR) and throughput of the hydrocarbon liquids
- (e) Process simulators (HYSIM®, HYSYS®, WINSIM®, PROSIM®, PROMAX, etc.)
- (f) Direct measurement of emissions

[From plan approval 10-381A and 10-381B]

002 [25 Pa. Code §127.12b]**Plan approval terms and conditions.**

Visible emissions from using a flare shall not exceed the following limitations:

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

[From plan approval 10-381A and 10-381B]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

- (a) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, and any routine maintenance performed.
- (b) The permittee shall maintain records of the continuous presence of flame on the flare.
- (c) All required records shall be maintained for a minimum of 5 years and shall be made available to Department personnel upon request.

[From plan approval 10-381A and 10-381B]

V. REPORTING REQUIREMENTS.

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

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

- (a) Using a flare as an air cleaning device shall ensure destruction of VOC emissions to the flare stack by maintaining the heat content of the flare gas, and by utilizing the thermocouple to continuously monitor the presence of a flame.
- (b) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[From plan approval 10-381A and 10-381B]

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

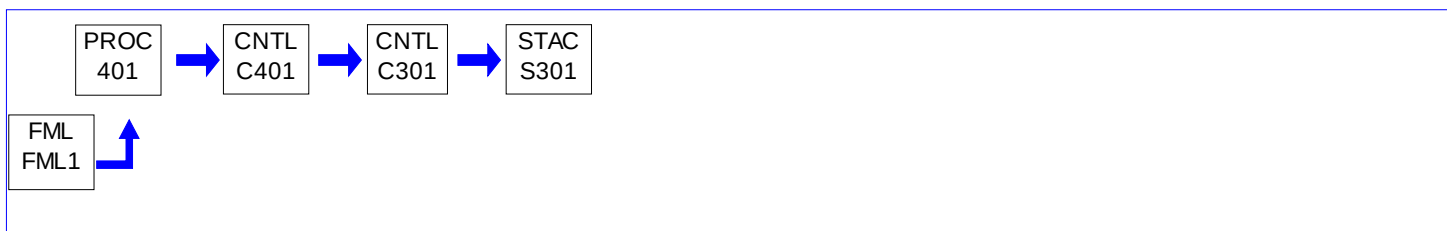
Source ID: 401

Source Name: TEG DEHYDRATOR 104 MILLION SCFD

Source Capacity/Throughput:

4.333 MMCF/HR

Natural Gas

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) VOC emissions from this source, as determined using GRI-GLYCalc or ProMax computer software, or an alternative method as approved by the Department, shall not exceed 7.46 tons per year for each glycol unit [based on the combined regenerator vent/flash gas emissions from ProMax], calculated as a 12-month rolling total.

(b) The Department shall reserve the right to require exhaust stack testing of this source as deemed necessary to verify source emissions for purposes of determining malfunctions and /or compliance with any applicable requirements.

[From plan approval 10-00381C, Section D, Source 401, Condition #001.]

II. TESTING REQUIREMENTS.**# 002 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The Department shall reserve the right to require exhaust stack testing of this source as deemed necessary to verify source emissions for purposes of determining malfunctions and/or compliance with any applicable requirements.

[From plan approval 10-381B, Section D, Source 201 (TEG Dehydrator which had Source ID changed to 401), Condition #002]

III. MONITORING REQUIREMENTS.

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

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

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

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

(c) The permittee shall maintain monthly records of the amount of fuel combusted and hours of operation of this source.

(d) The permittee shall maintain daily records of the throughput and glycol circulation rate of this source.

(e) All required records shall be maintained for a minimum of 5 years and shall be made available to Department personnel

**SECTION D. Source Level Requirements**

upon request.

[From plan approval 10-00381C, Section D, Source 401, Condition #002]

V. REPORTING REQUIREMENTS.

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

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

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

[From plan approval 10-381B, Section D, Source 201 (TEG Dehydrator which had Source ID changed to 401), Condition #004]

VII. ADDITIONAL REQUIREMENTS.**# 005 [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.**

[Only selected definitions are printed below. Refer to regulation for complete listing of definitions. A copy of the regulation is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-HH/section-63.761>]

All terms used in this subpart shall have the meaning given them in the Clean Air Act (Act), subpart A of this part (General Provisions), and in this section. If the same term is defined in subpart A and in this section, it shall have the meaning given in this section for purposes of this subpart.

API gravity means the weight per unit volume of hydrocarbon liquids as measured by a system recommended by the American Petroleum Institute (API) and is expressed in degrees.

BTEX means benzene, toluene, ethyl benzene and xylene.

Closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and if necessary, flow inducing devices that transport gas or vapor from an emission point to one or more control devices. If gas or vapor from regulated equipment is routed to a process (e.g., to a fuel gas system), the conveyance system shall not be considered a closed-vent system and is not subject to closed-vent system standards.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Equipment leaks means emissions of HAP from ancillary equipment (as defined in this section) and compressors.

Gas-condensate-glycol (GCG) separator means a two- or three-phase separator through which the "rich" glycol stream of a glycol dehydration unit is passed to remove entrained gas and hydrocarbon liquid. The GCG separator is commonly referred to as a flash separator or flash tank.

Gas-to-oil ratio (GOR) means the number of standard cubic meters of gas produced per liter of crude oil or other hydrocarbon liquid.

**SECTION D. Source Level Requirements**

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Glycol dehydration unit baseline operations means operations representative of the large glycol dehydration unit operations as of June 17, 1999 and the small glycol dehydrator unit operations as of August 23, 2011. For the purposes of this subpart, for determining the percentage of overall HAP emission reduction attributable to process modifications, baseline operations shall be parameter values (including, but not limited to, glycol circulation rate or glycol-HAP absorbency) that represent actual long-term conditions (i.e., at least 1 year). Glycol dehydration units in operation for less than 1 year shall document that the parameter values represent expected long-term operating conditions had process modifications not been made.

Glycol dehydration unit process vent means the glycol dehydration unit reboiler vent and the vent from the GCG separator (flash tank), if present.

Glycol dehydration unit reboiler vent means the vent through which exhaust from the reboiler of a glycol dehydration unit passes from the reboiler to the atmosphere or to a control device.

In VHAP service means that a piece of ancillary equipment or compressor either contains or contacts a fluid (liquid or gas) which has a total volatile HAP (VHAP) concentration equal to or greater than 10 percent by weight as determined according to the provisions of § 63.772(a).

In wet gas service means that a piece of equipment contains or contacts the field gas before the extraction of natural gas liquids.

Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, or the fractionation of mixed NGL to natural gas products, or a combination of both.

No detectable emissions means no escape of HAP from a device or system to the atmosphere as determined by:

- (1) Instrument monitoring results in accordance with the requirements of § 63.772(c); and
- (2) The absence of visible openings or defects in the device or system, such as rips, tears, or gaps.

Shutdown means for purposes including, but not limited to, periodic maintenance, replacement of equipment, or repair, the cessation of operation of a glycol dehydration unit, or other affected source under this subpart, or equipment required or used solely to comply with this subpart.

Small glycol dehydration unit means a glycol dehydration unit, located at a major source, with an actual annual average natural gas flowrate less than 85 thousand standard cubic meters per day or actual annual average benzene emissions less than 0.90 Mg/yr, determined according to § 63.772(b).

Startup means the setting into operation of a glycol dehydration unit, or other affected equipment under this subpart, or equipment required or used to comply with this subpart. Startup includes initial startup and operation solely for the purpose of testing equipment.

Total organic compounds or TOC, as used in this subpart, means those compounds which can be measured according to the procedures of Method 18, 40 CFR part 60, appendix A.

UA plus offset and UC is defined as the area occupied by each urbanized area, each urban cluster that contains at least 10,000 people, and the area located two miles or less from each urbanized area boundary.

Urban-1 County is defined as a county that contains a part of a Metropolitan Statistical Area with a population greater than 250,000, based on the Office of Management and Budget's Standards for defining Metropolitan and Micropolitan Statistical Areas (December 27, 2000), and Census 2000 Data released by the U.S. Census Bureau.

**SECTION D. Source Level Requirements**

Urbanized area refers to Census 2000 Urbanized Area, which is defined in the Urban Area Criteria for Census 2000 (March 15, 2002). Essentially, an urbanized area consists of densely settled territory with a population of at least 50,000 people.

Urban cluster refers to a Census 2000 Urban Cluster, which is defined in the Urban Area Criteria for Census 2000 (March 15, 2002). Essentially, an urban cluster consists of densely settled territory with at least 2,500 people but fewer than 50,000 people.

Volatile hazardous air pollutant concentration or VHAP concentration means the fraction by weight of all HAP contained in a material as determined in accordance with procedures specified in § 63.772(a).

[64 FR 32628, June 17, 1999, as amended at 66 FR 34551, June 29, 2001; 72 FR 37, Jan. 3, 2007; 77 FR 49569, Aug. 16, 2012]

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.764]**Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities**
General standards.

(a) Table 2 of this subpart specifies the provisions of subpart A (General Provisions) of this part that apply and those that do not apply to owners and operators of affected sources subject to this subpart.

(b) All reports required under this subpart shall be sent to the Administrator at the appropriate address listed in § 63.13. Reports may be submitted on electronic media.

(c) [Not applicable]

(d) [Not applicable. This unit has been exempted under (e)(1)(ii) below.]

(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) [Not applicable]

(f) [Not applicable]

(g) - (h) [Reserved]

(i) In all cases where the provisions of this subpart require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of this standard to fail to take action to repair the leak(s) within the specified time. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of this standard. However, if the repairs are unsuccessful, and a leak is detected, the owner or operator shall take further action as required by the applicable provisions of this subpart.

(j) At all times the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[64 FR 32628, June 17, 1999, as amended at 66 FR 34551, June 29, 2001; 72 FR 38, Jan. 3, 2007; 77 FR 49570, Aug. 16, 2012]

**SECTION D. Source Level Requirements****# 007 [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.**

(a) [Not applicable.]

(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) [Not applicable]

(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) - (i) [Not applicable.]

[64 FR 32628, June 17, 1999, as amended at 66 FR 34552, June 29, 2001; 72 FR 38, Jan. 3, 2007; 77 FR 49573, Aug. 16, 2012]

008 [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.**

(a) - (c) [Not applicable]

(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) [Not applicable]

(ii) The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with §63.772(b)(2).

(2) [Not applicable]

(e) - (i) [Not applicable]

[64 FR 32628, June 17, 1999, as amended at 66 FR 34554, June 29, 2001; 72 FR 39, Jan. 3, 2007; 77 FR 49579, Aug. 16, 2012]

**SECTION D. Source Level Requirements**

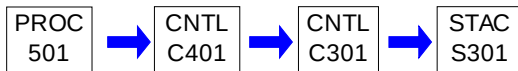
Source ID: 501

Source Name: PNEUMATIC DEVICES

Source Capacity/Throughput:

1.000 MCF/HR

Natural Gas

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 601

Source Name: VENTING/BLOWDOWNS

Source Capacity/Throughput:

8.000 MCF/HR

Natural Gas

PROC
601STAC
Z601**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.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Blowdown or Venting:

Emissions from scheduled and unscheduled blowdowns shall be reported in the annual emissions inventory.

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 701

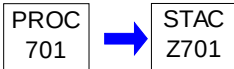
Source Name: FUGITIVES FROM COMPONENT LEAKS

Source Capacity/Throughput:

5.000 MMCF/HR

Natural Gas

Conditions for this source occur in the following groups: 5 - STATE STDS FOR UNCONVENTIONAL GAS

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 801

Source Name: PIGGING OPERATIONS

Source Capacity/Throughput:

383.000 CF/HR

Natural Gas

PROC
801STAC
Z801**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from pigging operations shall be less than 2.7 TPY

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The facility shall keep records of each pigging operation including the date and time of the operation, type and volume of liquids cleared, and emissions from the pig chamber.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 910

Source Name: L-001, TRUCK LOAD OUT OPERATIONS FOR CONDENSATE

Source Capacity/Throughput:

1.758 BBL/HR

CONDENSATE

PROC
910STAC
Z910**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 920

Source Name: L-002, TRUCK LOAD OUT OPERATIONS FOR PRODUCED WATER

Source Capacity/Throughput:

1.136 BBL/HR

PRODUCED WATER

PROC
920STAC
Z920**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: 1 - ALL COMPRESSOR ENGINES

Group Description: State requirements for natural gas fueled compressor engines

Sources included in this group

ID	Name
101	1775 BHP, CAT G3606TA, COMP ENG C-1, SN 4ZS01658
102	1775 BHP, CAT G3606TA, COMP ENG C-2, SN 4ZS01663
103	1775 BHP, CAT G3606TA, COMP ENG C-3, SN 4ZS01690
104	1775 BHP, CAT G3606TA, COMP ENG C-4, SN 4ZS00521
105	1775 BHP, CAT G3606TA, COMP ENG C-5, SN 4ZS00527
106	1775 BHP, CAT G3606TA, COMP ENG C-6, SN 4ZS01155

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

No person may permit the emission into the outdoor atmosphere of particulate matter from any process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]**General**

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

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

Emissions from each engine shall not exceed the following:

NO_x: 0.50 g/bhp-hr

CO: 47 ppmvd @ 15% O₂ or 93% reduction.

VOC: 0.20 g/bhp-hr (defined as NMNEHC as propane excluding formaldehyde)

Formaldehyde: 0.03 g/bhp-hr

[From plan approval 10-381B. Compliance with this condition assures compliance with the emission restrictions of 40 CFR 60 Subpart JJJJ Table 1]

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

[The requirement for a Initial stack test from plan approvals 10-381A and 10-381B to demonstrate compliance with the NO_x, CO, VOC, and formaldehyde emission limits for Sources 101 through 106 is a one-time requirement which has already been met.]

[From plan approvals 10-381A and 10-381B, Section E, Condition #005.]

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

(Derived from GP-5 Rev. 6/2018)

(a) When conducting a performance test for an engine, the owner or operator must submit the test protocol described in Section E (Source Group Restrictions: 1 - ALL COMPRESSOR ENGINES) Subsection II (TESTING REQUIREMENTS) Condition #007 below for review and approval.

**SECTION E. Source Group Restrictions.**

(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 NO_x 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, or ASTM D6348; and

(D) The formaldehyde concentration of the exhaust gas, if applicable, using 40 CFR Part 63, Appendix A, Method 320 or ASTM D6348.

(c) If at any time the owner or operator operates the engine in excess of the highest achievable load plus 10% for a period greater than 30 days, the owner or operator must perform a stack test within 180 days from the anomalous operation.

[From plan approval 10-00381C, Group 1, Condition #002]

006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Within 180 days of the issuance of this Plan Approval, a stack test shall be performed in accordance with the provisions of Chapter 139 (relating to sampling and testing) of the Rules and Regulations of the Department of Environmental Protection. The stack test shall be conducted as specified in 'Source Group Restrictions: 1 - ALL COMPRESSOR ENGINES' Subsection II 'TESTING REQUIREMENTS' Condition #002 of Plan Approval 10-00381C for the following pollutants.

- NO_x,
- CO,
- NMNEHC, and
- formaldehyde.

(b) The facility shall conduct subsequent performance testing every 3 years or 8,760 hours, whichever comes first, in accordance with the provisions of Chapter 139 (relating to sampling and testing) of the Rules and Regulations of the Department of Environmental Protection. The stack test shall be conducted as specified in 'Source Group Restrictions: 1 - ALL COMPRESSOR ENGINES' Subsection II 'TESTING REQUIREMENTS' Condition #002 of Plan Approval 10-00381C for the following pollutants.

- NO_x,
- CO,

**SECTION E. Source Group Restrictions.**

- NMNEHC, and
- formaldehyde.

[From plan approval 10-00381C, Section E, Group 1, Condition #003]

007 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[The Source Testing Manual is PA DEP document number 274-0300-002. A copy can be obtained 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 (i) of this condition. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(b) (1) 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) or if a different stack testing company is used or if an applicable section of the stack test manual has been revised since the previous approval, a new protocol is required to be submitted for approval.

(2) Any testing protocol that was approved by the Department Division of Source Testing prior to September 1, 2023, shall not be used unless specifically re-approved by the Department. The permittee shall contact the Division of Source Testing for a request to re-use any protocol approved prior to September 1, 2023.

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

(1) Submittals pertaining to emissions testing, specifically test protocols and test reports, shall be made by emailing electronic copies submissions to both PSIMS Administration in Central Office and to the Regional Office AQ Program at the following e-mail addresses:

CENTRAL OFFICE:
RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE:
RA-EPNWstacktesting@pa.gov

(2) The notifications of emissions testing dates shall be submitted directly to:

(i) the DEP's OnBase electronic upload website where it will be forwarded to the Northwest Regional Office Air Quality Inspector. Upload the written notification at this web address:

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

(ii) IF the Protocol Reviewer at Central Office Division of Source Testing requested a copy of the notification, then submit a copy to the email address provided by the protocol reviewer.

(d) 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 (c) of this condition. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.

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

(f) 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.

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

**SECTION E. Source Group Restrictions.**

- (1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- (2) Permit number(s) and condition(s) which are the basis for the evaluation.
- (3) Summary of results with respect to each applicable permit condition.
- (4) Statement of compliance or non-compliance with each applicable permit condition.
- (h) 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.
- (i) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (j) 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.
- (k) Actions Related to Noncompliance Demonstrated by a Stack Test:
- (1) If the results of a stack test, performed as required by this permit, 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. The notification shall be submitted directly to: the DEP's OnBase electronic upload website where it will be forwarded to the Northwest Regional Office Air Quality Inspector. Upload the written notification at this web address:
<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>.
- (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.
- [Derived from plan approval 10-381C, Section E, Condition #004, as modified to reflect updated submittal requirements from PADEP Division of Source Testing.]

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

(Derived from GP-5 Rev. 6/2018)

Periodic monitoring shall be conducted every 2,500 hours of operation.

(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.

**SECTION E. Source Group Restrictions.**

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

(ii) Determine NO_x and CO emissions and Oxygen concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522 or by following the procedures in Section E., Subsection II. #005(b)(ii) - (iv)(A) and (B) of this Operating Permit.

(iii) If the measured NO_x 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 #005 above within 180 days of the periodic monitoring.

(c) The 2,500 hours of operation count resets after any performance test performed in accordance with Condition #005 above.

(d) The owner or operator shall maintain the catalyst inlet temperature to greater than or equal to 450 °F and less than or equal to 1350 °F, or as specified by the manufacturer. [The facility uses a high temperature kill switch to ensure the temperature range is not exceeded.]

[From plan approval 10-00381C, Section D, Group 1, Condition #006]

IV. RECORDKEEPING REQUIREMENTS.

009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

[From plan approval 10-381B]

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.

010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

[From plan approval 10-381B]

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: 2 - NEW COMPRESSOR ENGINES - JJJJ

Group Description: 40 CFR Part 60 Subpart JJJJ for non-emergency ICE

Sources included in this group

ID	Name
101	1775 BHP, CAT G3606TA, COMP ENG C-1, SN 4ZS01658
102	1775 BHP, CAT G3606TA, COMP ENG C-2, SN 4ZS01663
103	1775 BHP, CAT G3606TA, COMP ENG C-3, SN 4ZS01690
106	1775 BHP, CAT G3606TA, COMP ENG C-6, SN 4ZS01155

I. RESTRICTIONS.**Emission Restriction(s).**

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 Subpart JJJJ Table 1]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Table 1 to Subpart JJJJ of Part 60.--

[The Table 1 categories of Non-emergency SI Natural Gas hp $\geq$ 500 applies to these engines; however, the emission standards of Table 1 to 40 CFR Part 60 Subpart JJJJ are streamlined out of the operating permit in favor of the more stringent NO_x, CO, & VOC emission limits from plan approvals 10-381A and 10-381B, as printed in Section E Group 1 of this permit. A copy of the emission standards of Table 1 to subpart JJJJ is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/appendix-Table%201%20to%20Subpart%20JJJJ%20of%20Part%2060>]

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) - (d) [Not applicable]

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

(f) - (h) [Not applicable]

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

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

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

[73 FR 3591, Jan. 18, 2008]

II. TESTING REQUIREMENTS.

004 [25 Pa. Code §127.441]
Operating permit terms and conditions.

Refer to the Testing Condition in Source Group 1 of this permit for the PA DEP procedures associated with stack testing.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 Subpart JJJJ Table 2]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
Table 2 to Subpart JJJJ of Part 60.--

[Refer to the Code of Federal Regulations, 40 CFR Part 63 Subpart JJJJ Table 2, for the Reference Methods for

**SECTION E. Source Group Restrictions.**

Performance Tests. A copy of Table 2 is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/appendix-Table%20%20to%20Subpart%20JJJJ%20of%20Part%2060>]

**# 006 [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:

$$\text{(Equation 1) } ER = \frac{Cd * 1.912 * 10^{-3} * Q * T}{HP-hr}$$

[Refer to regulation for formula. A copy of the formula is available at this web address:
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFR321158bfc46b6b8/section-60.4244>]

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:

$$\text{(Equation 2) } ER = \frac{Cd * 1.164 * 10^{-3} * Q * T}{HP-hr}$$

[Refer to regulation for formula. A copy of the formula is available at this web address:
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFR321158bfc46b6b8/section-60.4244>]

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.

**SECTION E. Source Group Restrictions.**

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:

$$\text{(Equation 3) } ER = \frac{Cd * 1.833 * 10^{-3} * Q * T}{HP-hr}$$

[Refer to regulation for formula. A copy of the formula is available at this web address:

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFR321158bfc46b6b8/section-60.4244>]

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.

$$\text{(Equation 4) } RFi = \frac{CMi}{CAi}$$

[Refer to regulation for formula. A copy of the formula is available at this web address:

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFR321158bfc46b6b8/section-60.4244>]

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.

$$\text{(Equation 5) } C_{icorr} = RFi * C_{imeas}$$

[Refer to regulation for formula. A copy of the formula is available at this web address:

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFR321158bfc46b6b8/section-60.4244>]

Where:

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

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

$$\text{(Equation 6) } C_{Peq} = 0.6098 * C_{icorr}$$

[Refer to regulation for formula. A copy of the formula is available at this web address:

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFR321158bfc46b6b8/section-60.4244>]

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ECFR321158bfc46b6b8/section-60.4244]

Where:

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

Notification, Reports, and Records for Owners and Operators

[73 FR 3591, Jan. 18, 2008]

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.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]

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

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

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

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

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

(2) Maintenance conducted on the engine.

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

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

(b) [Not applicable]

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

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

(2) The address of the affected source;

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

(4) Emission control equipment; and

(5) Fuel used.

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

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(e) [Not applicable]

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

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 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in § 60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in § 60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 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 within 1 year of engine startup to demonstrate compliance.

(iii) 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 within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

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

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

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

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(i) [Not applicable]

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

(c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in § 60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in § 60.4233(f).

(d) [Not applicable]

(e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of § 60.4233.

(f) [Not applicable]

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

(h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.

(1) Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

(i) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013; 86 FR 34362, June 29, 2021; 87 FR 48606, Aug. 10, 2022]

VII. ADDITIONAL REQUIREMENTS.

**# 009 [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?**

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

(b) The provisions of 40 CFR 1068.10 and 1068.11 apply for engine manufacturers. For others, the general confidential business information (CBI) provisions apply as described in 40 CFR part 2.

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[88 FR 4471, Jan. 24, 2023]

[A copy of Table 3 to subpart JJJJ is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/appendix-Table%203%20to%20Subpart%20JJJJ%20of%20Part%2060>]

010 [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?

[Selected definitions are printed below. Refer to regulation for remaining definitions of 40 CFR Part 60 Subpart JJJJ. A copy of the regulation is available at this webpage: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ/subject-group-ECFRa44e4d727923434/section-60.4248> .]

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

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 1054.107 and 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

- (1) 1,000 hours of operation.
- (2) Your recommended overhaul interval.
- (3) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 1048 or 1054, as appropriate.

Subpart means 40 CFR part 60, subpart JJJJ.

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

**SECTION E. Source Group Restrictions.**

Group Name: 3 - EXISTING COMPRESSOR ENGINES - ZZZZ

Group Description: 40 CFR Part 63 Subpart ZZZZ for non-emergency, non-remote, SI 2SLB RICE > 500 hp

Sources included in this group

ID	Name
104	1775 BHP, CAT G3606TA, COMP ENG C-4, SN 4ZS00521
105	1775 BHP, CAT G3606TA, COMP ENG C-5, SN 4ZS00527

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) Paragraph (b) is printed under Work Practice Requirements in this section of permit.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

[Language in paragraph § 63.6640(a) which refers to Tables 1a and 1b, Tables 2a and 2b, and Table 2c is omitted from this paragraph because it does not apply to these engines.]

(b) [Paragraph (b) of the regulation is printed under Reporting Requirements in this section of the permit.]

(c) [Paragraph (c) of the regulation is printed under Testing Requirements in this section of the permit.]

(d) [Not applicable]

(e) [Paragraph (e) of the regulation is printed under Reporting Requirements in this section of the permit.]

(f) [Not applicable]

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022]

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

Refer to the Testing Condition in Source Group 1 of this permit for the PADEP procedures associated with stack testing.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 4]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Table 4 to Subpart ZZZZ of Part 63.-- Requirements for Performance Tests**

[Table 4 to 40 CFR Part 63 Subpart ZZZZ is incorporated into this operating permit by reference to the regulation. Table 4 is referenced in this permit by § 63.6640(c)(3) which is reference by Category 14.i of Table 6 to subpart ZZZZ.]

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[A copy of Table 4 is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ/appendix-Table%20A%20to%20Subpart%20ZZZZ%20of%20Part%2063>]

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APPENDIX A to Subpart ZZZZ of Part 63 -- Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

[Appendix A to 40 CFR Part 63 Subpart ZZZZ is incorporated into this operating permit by reference to the regulation. Table 4 is referenced in this permit by § 63.6640(c)(3) which is reference by Category 14.i of Table 6 to subpart ZZZZ, which allows for use of a PORTABLE ANALYZER for compliance demonstration with the testing requirement of Category 14.i of Table 6.]

[A copy of Appendix A is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ/appendix-Appendix%20A%20to%20Subpart%20ZZZZ%20of%20Part%2063>]

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 6]

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

Table 6 to Subpart ZZZZ of Part 63.-- Continuous Compliance With Emission Limitations and Operating Limitations

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

[Category 14 of Table 6 to Subpart ZZZZ applies and is printed below. Remaining non-applicable categories from Table 6 are not printed in this condition.]

For each Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year, complying with the requirement to install an oxidation catalyst, you must demonstrate continuous compliance by

- i. Conducting annual compliance demonstrations as specified in § 63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂; and either
- ii. Collecting the catalyst inlet temperature data according to § 63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or
- iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.

[78 FR 6715, Jan. 30, 2013]

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6630]

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

How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) [Not applicable because Tables 1b and 2b of this subpart do not apply to Area sources.]

(c) [Paragraph (c) is printed under Reporting Requirements in this section of the permit.]

(d) [Not applicable to 4SLB RICE.]

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

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(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) [Paragraph (a) of the regulation is printed under Emission Restrictions in this section of the permit.]

(b) [Paragraph (b) of the regulation is printed under Reporting Requirements in this section of the permit.]

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O₂ using one of the O₂ measurement methods specified in Table 4 of this subpart. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must

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be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) [Not applicable]

(e) [Paragraph (e) of the regulation is printed under Reporting Requirements in this section of the permit.]

(f) [Not applicable]

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022]

III. MONITORING REQUIREMENTS.**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 5]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Table 5 to Subpart ZZZZ of Part 63.-- Initial Compliance With Emission Limitations and Operating Limitations**

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

[Category 13 of Table 5 to Subpart ZZZZ applies and is printed below. Non-applicable categories are not printed in this condition.]

For each Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year, complying with the requirement to install an oxidation catalyst, You have demonstrated initial compliance if . . .

- i. You have conducted an initial compliance demonstration as specified in § 63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂;
- ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in § 63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.

[78 FR 6712, Jan. 30, 2013]

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 6]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Table 6 to Subpart ZZZZ of Part 63.-- Continuous Compliance With Emission Limitations and Operating Limitations**

[Refer to the TESTING requirement of Table 6 to Subpart ZZZZ in this section of the permit for monitoring of catalyst inlet temperature (optionally) required by Subpart ZZZZ.]

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6635]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I monitor and collect data to demonstrate continuous compliance?**

- (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

IV. RECORDKEEPING REQUIREMENTS.**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in § 63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in § 63.8(f)(6)(i), if applicable.

(c) [Not applicable]

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) - (2) [Not applicable]

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) [Not applicable]

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022]

**SECTION E. Source Group Restrictions.****V. REPORTING REQUIREMENTS.**

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 7]

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

Table 7 to Subpart ZZZZ of Part 63.-- Requirements for Reports

[Category 3 of Table 7 to Subpart ZZZZ applies to these sources and is printed below. Remaining non-applicable categories are omitted from this condition.]

For each Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year, you must submit a compliance report.

The report must contain the results of the annual compliance demonstration, if conducted during the reporting period.

You must submit the report Semiannually according to the requirements in § 63.6650(b)(1)–(5).

[87 FR 48608, Aug. 10, 2022]

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6630]

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

How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) - (b) [Paragraphs (a) and (b) are printed under Testing Requirements in this section of the permit.]

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.6645.

(d) - (e) [Paragraphs (d) and (e) are printed under Testing Requirements in this section of the permit.]

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) [Paragraph (a) of the regulation is printed under Emission Restrictions in this section of the permit.]

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

[Language from 63.6640(b) referring to Tables 1a and 1b, Tables 2a and 2b, Table 2c is omitted from this condition because those tables do not apply to these engines.]

(c) [Paragraph (c) of the regulation is printed under Testing Requirements in this section of the permit.]

(d) [Not applicable]

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

[Non-applicable text from 63.6640(e) is omitted from this condition.]

(f) [Not applicable]

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[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022]

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6645]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What notifications must I submit and when?**

(a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) [Not applicable]

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) - (5) [Not applicable]

(c) - (g) [Not applicable]

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to § 63.10(d)(2).

(i) [Not applicable]

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013; 85 FR 73912, Nov. 19, 2020]

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What reports must I submit and when?**

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in § 63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in § 63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later

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than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) - (9) [Not applicable because (b)(1)-(5) are applicable.]

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in § 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control

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equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) - (h) [Not applicable]

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013; 87 FR 48607, Aug. 10, 2022]

VI. WORK PRACTICE REQUIREMENTS.**# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 2d]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions**

TABLE 2d TO SUBPART ZZZZ OF PART 63—REQUIREMENTS FOR EXISTING STATIONARY RICE LOCATED AT AREA SOURCES OF HAP EMISSIONS

[Category 9 of Table 2d applies and is printed below. Non-applicable categories are omitted from this condition.]

As stated in §§ 63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year, you must meet the following requirement, except during periods of startup: Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.

During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

[78 FR 6709, Jan. 30, 2013]

018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 6]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Table 6 to Subpart ZZZZ of Part 63.-- Continuous Compliance With Emission Limitations and Operating Limitations**

[Refer to the TESTING requirement of Table 6 to Subpart ZZZZ in this section of the permit for monitoring of catalyst inlet temperature and shutdown work practice (optionally) required by Subpart ZZZZ.]

019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

[Language in the regulation § 63.6603 which refers to § 63.6620 and Table 4 to this subpart is omitted from this condition]

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because § 63.6620 no longer applies and because Table 4 does not apply.]

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart.

[Language in the regulation which refers to Table 2b is omitted from this paragraph because Table 2b does not apply to these engines.]

(b) - (f) [Not applicable]

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

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

What are my general requirements for complying with this subpart?

(a) Paragraph (a) is printed under Emission Restrictions in this section of permit.

(b) At all times you 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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. 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.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

What are my monitoring, installation, operation, and maintenance requirements?

(a) - (d) [Not applicable]

(e) [none of (e)(1) through (10) are applicable since these are non-emergency, non-black start 4SLB stationary RICE with site rating greater than 500 hp and are operated more than 24 hours per calendar year.]

(f) - (g) [Not applicable]

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) [Not applicable]

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator

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must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

VII. ADDITIONAL REQUIREMENTS.

022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 8]

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

Table 8 to Subpart ZZZZ of Part 63.-- Applicability of General Provisions to Subpart ZZZZ

[Refer to regulation for Table 8 to Subpart ZZZZ of Part 63 for the Applicability of Part 63 Subpart A General Provisions to Subpart ZZZZ.]

[A copy of Table 8 is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ/appendix-Table%208%20to%20Subpart%20ZZZZ%20of%20Part%2063>]

[A link to the Subpart A General Provision is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63?toc=1>]

**SECTION E. Source Group Restrictions.**

Group Name: 4 - FEDERAL STDS 60-O000

Group Description: 40 CFR Part 60 Subpart O000

Sources included in this group

ID	Name
101-C1	COMPRESSOR C-1 ARIEL JGC-4 SN. F-38850
102-C2	COMPRESSOR C-2 ARIEL JGC-4 SN. F-38662
103-C3	COMPRESSOR C-3 ARIEL JGC-4 SN. F-39042

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420]****Subpart O000 - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution****What are my notification, reporting, and recordkeeping requirements?**

(a) - (b) [Paragraphs (a) and (b) of the regulation are printed under Reporting Requirements in this section of the permit.]

(c) Recordkeeping requirements. You must maintain the records identified as specified in §60.7(f) and in paragraphs (c)(1) through (14) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years.

(1) - (2) [Not applicable.]

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

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

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

(iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385.

(4) - (5) [Not applicable]

(6) Records of each closed vent system inspection required under §60.5416(a)(1) and (2) for centrifugal or reciprocating compressors or §60.5416(c)(1) for storage vessels.

(7) A record of each cover inspection required under §60.5416(a)(3) for centrifugal or reciprocating compressors or §60.5416(c)(2) for storage vessels.

(8) If you are subject to the bypass requirements of §60.5416(a)(4) for centrifugal or reciprocating compressors or §60.5416(c)(3) for storage vessels, a record of each inspection or a record each time the key is checked out or a record of each time the alarm is sounded.

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(9) - (13) [Not applicable]

(14) A log of records as specified in §§60.5412(d)(1)(iii) and 60.5413(e)(4) for all inspection, repair and maintenance activities for each control device failing the visible emissions test.

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58445, Sept. 23, 2013; 79 FR 79039, Dec. 31, 2014; 81 FR 35897, June 3, 2016; 85 FR 57069, Sept. 14, 2020]

V. REPORTING REQUIREMENTS.**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5410]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution****How do I demonstrate initial compliance with the standards for my gas well affected facility, centrifugal compressor, reciprocating compressor, pneumatic controller, storage vessel, equipment leaks, sweetening unit affected facilities, at onshore natural gas processing plants?**

[The language from this subsection of the regulation which is no longer applicable and pertains to initial compliance dates which have passed is omitted from this condition.]

[In accordance with 40 CFR §60.5420(b) and with a October 30, 2018, letter from the permittee to the US EPA requesting that multiple affected facility have a common schedule for the subpart OOOO compliance period, the compliance period and due dates for annual 40 CFR Part 60 Subpart OOOO reports for this facility is as follows.

The annual compliance period begins August 3 of each year and runs through August 2 of each year.

The annual compliance reports for subpart OOOO are due October 31 of each year, 90 days after the end of the compliance period.]

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58437, Sept. 23, 2013; 79 FR 79038, Dec. 31, 2014; 81 FR 35896, June 3, 2016]

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415]**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution****How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor, stationary reciprocating compressor, pneumatic controller, storage vessel affected facilities, and my affected facilities at onshore natural gas processing plants?**

(a) - (b) [Not applicable.]

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

(1) You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup, or October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

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

(3) You must replace the reciprocating compressor rod packing before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

(4) [Not applicable]

(d) - (g) [Not applicable.]

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58442, Sept. 23, 2013; 79 FR 79039, Dec. 31, 2014; 81 FR 35897, June 3, 2016]

**SECTION E. Source Group Restrictions.****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
What are my notification, reporting, and recordkeeping requirements?**

[In accordance with 40 CFR §60.5420(b) and with a October 30, 2018, letter from the permittee to the US EPA requesting that multiple affected facility have a common schedule for the subpart OOOO compliance period, the compliance period and due dates for annual 40 CFR Part 60 Subpart OOOO reports for this facility is as follows.

The annual compliance period begins August 3 of each year and runs through August 2 of each year.

The annual compliance reports for subpart OOOO are due October 31 of each year, 90 days after the end of the compliance period.]

(a) You must submit the notifications according to paragraphs (a)(1) and (2) of this section if you own or operate one or more of the affected facilities specified in §60.5365 that was constructed, modified, or reconstructed during the reporting period.

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

(2) [Not applicable.]

(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (6) of this section to the Administrator and performance test reports as specified in paragraph (b)(7) or (8) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (6) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.

(1) The general information specified in paragraphs (b)(1)(i) through (iv) of this section.

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

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

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

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

(2) - (3) [Not applicable.]

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

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

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

(5) - (8) [Not applicable]

(c) [Paragraph (c) of the regulation is printed under Recordkeeping Requirements in this section of the permit.]

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[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58445, Sept. 23, 2013; 79 FR 79039, Dec. 31, 2014; 81 FR 35897, June 3, 2016; 85 FR 57069, Sept. 14, 2020]

VI. WORK PRACTICE REQUIREMENTS.**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**
When must I comply with this subpart?

From § 60.5370(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.

[77 FR 49542, Aug. 16, 2012, as amended at 81 FR 35896, June 3, 2016]

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385]**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**
What standards apply to reciprocating compressor affected facilities?

You must comply with the standards in paragraphs (a) through (d) of this section for each reciprocating compressor affected facility.

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

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

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

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

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

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

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

[77 FR 49542, Aug. 16, 2012, as amended at 79 FR 79037, Dec. 31, 2014]

VII. ADDITIONAL REQUIREMENTS.**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**
What part of the General Provisions apply to me?

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

[Source: 77 FR 49542, Aug. 16, 2012]

[A copy of Table 3 is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part->

**SECTION E. Source Group Restrictions.**

60/subpart-OOOO/appendix-Table%203%20to%20Subpart%20OOOO%20of%20Part%2060]

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430]**Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**
What definitions apply to this subpart?

[Selected definitions are printed below. Refer to regulation for remaining definitions of § 60.5430. A copy of the regulation is available at this web address: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-OOOO/section-60.5430>]

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

Acid gas means a gas stream of hydrogen sulfide (H₂S) and carbon dioxide (CO₂) that has been separated from sour natural gas by a sweetening unit.

Bleed rate means the rate in standard cubic feet per hour at which natural gas is continuously vented (bleeds) from a pneumatic controller.

City gate means the delivery point at which natural gas is transferred from a transmission pipeline to the local gas utility.

Collection system means any infrastructure that conveys gas or liquids from the well site to another location for treatment, storage, processing, recycling, disposal or other handling.

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature, pressure, or both, and remains liquid at standard conditions.

Continuous bleed means a continuous flow of pneumatic supply natural gas to the process control device (e.g., level control, temperature control, pressure control) where the supply gas pressure is modulated by the process condition, and then flows to the valve controller where the signal is compared with the process set-point to adjust gas pressure in the valve actuator.

Crude Oil and Natural Gas Production source category means:

(1) [Not applicable]; and

(2) Natural gas production and processing, which includes the well and extends to, but does not include, the point of custody transfer to the natural gas transmission and storage segment.

Custody transfer means the transfer of crude oil or natural gas after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Equipment, as used in the standards and requirements in this subpart relative to the equipment leaks of VOC from

**SECTION E. Source Group Restrictions.**

onshore natural gas processing plants, means each pump, pressure relief device, open-ended valve or line, valve, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by those same standards and requirements in this subpart.

Flare means a thermal oxidation system using an open (without enclosure) flame. Completion combustion devices as defined in this section are not considered flares.

Flow line means a pipeline used to transport oil and/or gas to a processing facility, a mainline pipeline, re-injection, or routed to a process or other useful purpose.

Group 1 storage vessel means a storage vessel, as defined in this section, for which construction, modification or reconstruction has commenced after August 23, 2011, and on or before April 12, 2013.

Group 2 storage vessel means a storage vessel, as defined in this section, for which construction, modification or reconstruction has commenced after April 12, 2013, and on or before September 18, 2015.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in § 60.485a(e) or § 60.5401(g)(2) of this part.

In wet gas service means that a compressor or piece of equipment contains or contacts the field gas before the extraction step at a gas processing plant process unit.

Initial flowback stage means the period during a well completion operation which begins at the onset of flowback and ends at the separation flowback stage.

Intermediate hydrocarbon liquid means any naturally occurring, unrefined petroleum liquid.

Intermittent/snap-action pneumatic controller means a pneumatic controller that vents non-continuously.

Maximum average daily throughput means the earliest calculation of daily average throughput during the 30-day PTE evaluation period employing generally accepted methods.

Natural gas-driven pneumatic controller means a pneumatic controller powered by pressurized natural gas.

Natural gas liquids means the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.

Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

Natural gas transmission means the pipelines used for the long distance transport of natural gas (excluding processing). Specific equipment used in natural gas transmission includes the land, mains, valves, meters, boosters, regulators, storage vessels, dehydrators, compressors, and their driving units and appurtenances, and equipment used for transporting gas from a production plant, delivery point of purchased gas, gathering system, storage area, or other wholesale source of gas to one or more distribution area(s).

Natural gas transmission and storage segment means the transport or storage of natural gas prior to delivery to a "local distribution company custody transfer station" (as defined in this section) or to a final end user (if there is no local distribution company custody transfer station). For the purposes of this subpart, natural gas enters the natural gas transmission and storage segment after the natural gas processing plant, when present. If no natural gas processing plant is present, natural gas enters the natural gas transmission and storage segment after the point of "custody transfer" (as defined in this section). A compressor station that transports natural gas prior to the point of "custody transfer" or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage segment.

Non-natural gas-driven pneumatic controller means an instrument that is actuated using other sources of power than

**SECTION E. Source Group Restrictions.**

pressurized natural gas; examples include solar, electric, and instrument air.

Pneumatic controller means an automated instrument used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature.

Pressure vessel means a storage vessel that is used to store liquids or gases and is designed not to vent to the atmosphere as a result of compression of the vapor headspace in the pressure vessel during filling of the pressure vessel to its design capacity.

Process unit means components assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

Produced water means water that is extracted from the earth from an oil or natural gas production well, or that is separated from crude oil, condensate, or natural gas after extraction.

Reciprocating compressor means a piece of equipment that increases the pressure of a process gas by positive displacement, employing linear movement of the driveshaft.

Reciprocating compressor rod packing means a series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere.

Recovered gas means gas recovered through the separation process during flowback.

Recovered liquids means any crude oil, condensate or produced water recovered through the separation process during flowback.

Reduced emissions completion means a well completion following fracturing or refracturing where gas flowback that is otherwise vented is captured, cleaned, and routed to the flow line or collection system, re-injected into the well or another well, used as an on-site fuel source, or used for other useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

Reduced sulfur compounds means H₂S, carbonyl sulfide (COS), and carbon disulfide (CS₂).

Returned to service means that a Group 1 or Group 2 storage vessel affected facility that was removed from service has been:

- (1) Reconnected to the original source of liquids or has been used to replace any storage vessel affected facility; or
- (2) Installed in any location covered by this subpart and introduced with crude oil, condensate, intermediate hydrocarbon liquids or produced water.

Routed to a process or route to a process means the emissions are conveyed via a closed vent system to any enclosed portion of a process where the emissions are predominantly recycled and/or consumed in the same manner as a material that fulfills the same function in the process and/or transformed by chemical reaction into materials that are not regulated materials and/or incorporated into a product; and/or recovered.

Storage vessel means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support. A well completion vessel that receives recovered liquids from a well after startup of production following flowback for a period which exceeds 60 days is considered a storage vessel under this subpart. A tank or other vessel shall not be considered a storage vessel if it has been removed from service in accordance with the requirements of § 60.5395(f) until such time as such tank or other vessel has been returned to service. A tank or other vessel shall not be considered a storage vessel if it has been removed from service in accordance with the requirements of § 60.5395(f) until such time as such tank or other vessel has been returned to service. For the purposes of this subpart, the following are not considered storage vessels:

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(1) Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If you do not keep or are not able to produce records, as required by § 60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel from the date the original vessel was first located at the site. This exclusion does not apply to a well completion vessel as described above.

(2) Process vessels such as surge control vessels, bottoms receivers or knockout vessels.

(3) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

Sulfur production rate means the rate of liquid sulfur accumulation from the sulfur recovery unit.

Sulfur recovery unit means a process device that recovers element sulfur from acid gas.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Total Reduced Sulfur (TRS) means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide as measured by Method 16 of appendix A to part 60 of this chapter.

Total SO₂ equivalents means the sum of volumetric or mass concentrations of the sulfur compounds obtained by adding the quantity existing as SO₂ to the quantity of SO₂ that would be obtained if all reduced sulfur compounds were converted to SO₂ (ppmv or kg/dscm (lb/dscf)).

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58447, Sept. 23, 2013; 79 FR 79040, Dec. 31, 2014; 80 FR 48268, Aug. 12, 2015; 81 FR 35898, June 3, 2016; 85 FR 57069, Sept. 14, 2020]

**SECTION E. Source Group Restrictions.**

Group Name: 5 - STATE STDS FOR UNCONVENTIONAL GAS

Group Description: 25 Pa. Code § 129.121 - 129.130, Control of VOC emissions from Unconventional natural gas s

Sources included in this group

ID	Name
101-C1	COMPRESSOR C-1 ARIEL JGC-4 SN. F-38850
102-C2	COMPRESSOR C-2 ARIEL JGC-4 SN. F-38662
103-C3	COMPRESSOR C-3 ARIEL JGC-4 SN. F-39042
104-C4	COMPRESSOR C-4 ARIEL JGC-4 SN. F-22245
105-C5	COMPRESSOR C-5 ARIEL JGC-4 SN. F-22484
106-C6	COMPRESSOR C-6 ARIEL JGC-4 SN. F-31649
701	FUGITIVES FROM COMPONENT LEAKS

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

001 [25 Pa. Code §129.127]

Fugitive emissions components

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

- (1) An unconventional well site.
- (2) A natural gas gathering and boosting station.
- (3) A natural gas processing plant.

(b) - (d) [Not applicable because this facility is not located at a well site.]

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

- (1) An initial AVO inspection on or before February 8, 2023, with monthly inspections thereafter separated by at least 15 calendar days but not more than 45 calendar days.
- (2) An initial LDAR inspection program on or before February 8, 2023, with quarterly inspections thereafter separated by at least 60 calendar days but not more than 120 calendar days using one or more of the following:
 - (i) OGI equipment.
 - (ii) A gas leak detector that meets the requirements of EPA Method 21.
 - (iii) Another leak detection method approved by the Department.

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

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

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plan must include the following elements:

- (1) The technique used for determining fugitive emissions.
 - (2) A list of fugitive emissions detection equipment, including the manufacturer and model number, that may be used at the facility.
 - (3) A list of personnel that may conduct the monitoring surveys at the facility, including their training and experience.
 - (4) The procedure and timeframe for identifying and fixing a fugitive emissions component from which fugitive emissions are detected, including for a component that is unsafe-to-repair.
 - (5) The procedure and timeframe for verifying fugitive emissions component repairs.
 - (6) The procedure and schedule for verifying the fugitive emissions detection equipment is operating properly.
 - (i) For OGI equipment, the verification must be completed as specified in subsection (h).
 - (ii) For gas leak detection equipment using EPA Method 21, the verification must be completed as specified in subsection (i).
 - (iii) For a Department-approved method, a copy of the request for approval that shows the method's equivalence to subsection (h) or subsection (i).
 - (7) A sitemap.
 - (8) If using OGI, a defined observation path that meets the following:
 - (i) Ensures that all fugitive emissions components are within sight of the path.
 - (ii) Accounts for interferences.
 - (9) If using EPA Method 21, a list of the fugitive emissions components to be monitored and an identification method to locate them in the field.
 - (10) A written plan for each fugitive emissions component designated as difficult-to-monitor or unsafe-to-monitor which includes the following:
 - (i) A method to identify a difficult-to-monitor or unsafe-to-monitor component in the field.
 - (ii) The reason each component was identified as difficult-to-monitor or unsafe-to-monitor.
 - (iii) The monitoring schedule for each component identified as difficult-to-monitor or unsafe-to-monitor. The monitoring schedule for difficult-to-monitor components must include at least one survey per year no more than 13 months apart.
- (h) Verification procedures for OGI equipment. An owner or operator that identifies OGI equipment in the fugitive emissions monitoring plan in subsection (g)(6)(i) shall complete the verification by doing the following:
- (1) Demonstrating that the OGI equipment is capable of imaging a gas:
 - (i) In the spectral range for the compound of highest concentration in the potential fugitive emissions.
 - (ii) That is half methane, half propane at a concentration of 10,000 ppm at a flow rate of less than or equal to 60 grams per hour (2.115 ounces per hour) from a 1/4-inch diameter orifice.
 - (2) Performing a verification check each day prior to use.

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- (3) Determining the equipment operator's maximum viewing distance from the fugitive emissions component and how the equipment operator will ensure that this distance is maintained.
 - (4) Determining the maximum wind speed during which monitoring can be performed and how the equipment operator will ensure monitoring occurs only at wind speeds below this threshold.
 - (5) Conducting the survey by using the following procedures:
 - (i) Ensuring an adequate thermal background is present to view potential fugitive emissions.
 - (ii) Dealing with adverse monitoring conditions, such as wind.
 - (iii) Dealing with interferences, such as steam.
 - (6) Following the manufacturer's recommended calibration and maintenance procedures.
- (i) Verification procedures for gas leak detection equipment using EPA Method 21. An owner or operator that identifies gas leak detection equipment using EPA Method 21 in the fugitive emissions monitoring plan in subsection (g)(6)(ii) shall complete the verification by doing the following:
- (1) Verifying that the gas leak detection equipment meets:
 - (i) The requirements of Section 6.0 of EPA Method 21 with a fugitive emissions definition of 500 ppm or greater calibrated as methane using an FID-based instrument.
 - (ii) A site-specific fugitive emission definition that would be equivalent to subparagraph (i) for other equipment approved for use in EPA Method 21 by the Department.
 - (2) Using the average composition of the fluid, not the individual organic compounds in the stream, when performing the instrument response factor of Section 8.1.1 of EPA Method 21.
 - (3) Calculating the average stream response factor on an inert-free basis for process streams that contain nitrogen, air or other inert gases that are not organic hazardous air pollutants or VOCs.
 - (4) Calibrating the gas leak detection instrument in accordance with Section 10.1 of EPA Method 21 on each day of its use using zero air, defined as a calibration gas with less than 10 ppm by volume of hydrocarbon in air, and a mixture of methane in air at a concentration less than 10,000 ppm by volume as the calibration gases.
 - (5) Conducting the surveys which, at a minimum, must comply with the relevant sections of EPA Method 21, including Section 8.3.1.
- (j) Fugitive emissions detection devices. Fugitive emissions detection devices must be operated and maintained in accordance with manufacturer-recommended procedures and as required by the test method or a Department-approved method.
- (k) Background adjustment. For LDAR inspections using a gas leak detector in accordance with EPA Method 21, the owner or operator may choose to adjust the gas leak detection instrument readings to account for the background organic concentration level as determined by the procedures of Section 8.3.2 of EPA Method 21.
- (l) Repair and resurvey provisions. The owner or operator shall repair a leak detected from a fugitive emissions component as follows:
- (1) A first attempt at repair must be made within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:
 - (i) The purchase of a part is required. The repair must be completed no later than 10 calendar days after the receipt of the purchased part.

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(ii) The repair is technically infeasible because of one of the following reasons:

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

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

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

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

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

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

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

(ii) Tag the component for identification purposes.

(4) A gas leak is considered repaired if:

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

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

[Source: The provisions of this § 129.127 added December 9, 2022, effective December 10, 2022, 52 Pa.B. 7587.]

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the monthly AVO inspections required by 25 Pa. Code § 129.127(e)(1), the leaks detected, the repair methods, and repair delays.

**SECTION E. Source Group Restrictions.****# 003 [25 Pa. Code §129.130]****Recordkeeping and reporting**

(a) Recordkeeping. The owner or operator of a source subject to § 129.121 -- 129.129 shall maintain the applicable records onsite or at the nearest local field office for 5 years. The records shall be made available to the Department upon request.

(b) Storage vessels. [Not applicable]

(c) Natural gas-driven continuous bleed pneumatic controllers. [Not applicable]

(d) Natural gas-driven diaphragm pumps. [Not applicable]

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

(1) For a reciprocating compressor under § 129.126(b)(1)(i) (relating to compressors), the following records:

- (i) The cumulative number of hours of operation.
- (ii) The date and time of each rod packing replacement.

(2) For a reciprocating compressor under § 129.126(b)(1)(ii), the following records:

- (i) The number of months since the previous replacement of the rod packing.
- (ii) The date of each rod packing replacement.

(3) For a reciprocating compressor under § 129.126(b)(2), the following records:

(i) A statement that emissions from the rod packing are being routed to a control device or a process through a closed vent system under negative pressure.

(ii) The date of installation of a rod packing emissions collection system and closed vent system as specified in § 129.126(b)(2).

(4) Each deviation when the reciprocating compressor was not operated in compliance with § 129.126(b).

(f) Centrifugal compressors. [Not applicable]

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

(1) - (2) [Not applicable because this facility is not located at a well site.]

(3) For a well site subject to § 129.127(c)(2) or (c)(3), a natural gas gathering and boosting station or a natural gas processing plant:

- (i) The fugitive emissions monitoring plan under § 129.127(g).
- (ii) The records of each monitoring survey conducted under § 129.127(c)(2)(ii), (c)(3)(ii) or (e)(2). The monitoring survey must include the following information:

- (A) The facility name and location.
- (B) The date, start time and end time of the survey.
- (C) The name of the equipment operator performing the survey.

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(D) The monitoring instrument used.

(E) The ambient temperature, sky conditions and maximum wind speed at the time of the survey.

(F) Each deviation from the monitoring plan or a statement that there were none.

(G) Documentation of each fugitive emission including:

(I) The identification of each component from which fugitive emissions were detected.

(II) The instrument reading of each fugitive emissions component that meets the definition of a leak under § 129.122(a) (relating to definitions, acronyms and EPA methods).

(III) The repair methods applied in each attempt to repair the component.

(IV) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered.

(V) The reason a component was placed on delay of repair.

(VI) The date of successful repair of the component.

(VII) If repair of the component was not completed during the monitoring survey in which the fugitive emissions were discovered, the information on the instrumentation or the method used to resurvey the component after repair.

(h) Covers. [Not applicable]

(i) Closed vent systems. [Not applicable]

(j) Control devices. [Not applicable]

(k) [Paragraph (k) is printed under Reporting Requirements in this section of permit.]

[Source: The provisions of this § 129.130 added December 9, 2022, effective December 10, 2022, 52 Pa.B. 7587.]

V. REPORTING REQUIREMENTS.**# 004 [25 Pa. Code §129.130]****Recordkeeping and reporting**

(a) - (j) [Paragraphs (a) through (j) are printed under Recordkeeping Requirements in this section of the permit.]

(k) Reporting. The owner or operator of a source subject to § 129.121(a) (relating to general provisions and applicability) shall do the following:

(1) Submit an initial annual report to the Air Program Manager of the appropriate Department Regional Office by December 10, 2023, and annually thereafter on or before June 1.

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

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

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

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

(i) Storage vessels. [Not applicable]

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- (ii) Natural gas-driven continuous bleed pneumatic controllers. [Not applicable]
- (iii) Natural gas-driven diaphragm pumps. [Not applicable]
- (iv) Reciprocating compressors. The report for each reciprocating compressor must include the information specified in subsection (e) for the reporting period, as applicable.
- (v) Centrifugal compressors. [Not applicable]
- (vi) Fugitive emissions components. The report for each fugitive emissions component must include the records of each monitoring survey conducted during the reporting period as specified in subsection (g)(3)(ii).
- (vii) Covers. [Not applicable]
- (viii) Closed vent systems. [Not applicable]
- (ix) Control devices. [Not applicable]

[Source: The provisions of this § 129.130 added December 9, 2022, effective December 10, 2022, 52 Pa.B. 7587.]

VI. WORK PRACTICE REQUIREMENTS.**# 005 [25 Pa. Code §129.126]****Compressors**

(a) Applicability. This section applies to the owner or operator of a reciprocating compressor or centrifugal compressor subject to § 129.121(a)(4) (relating to general provisions and applicability) that meets the following:

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

(2) Centrifugal compressor. [Not applicable]

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

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

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

(A) The date of the most recent reciprocating compressor rod packing replacement.

(B) December 10, 2022, for a reciprocating compressor rod packing that has not yet been replaced.

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

(A) The date of the most recent reciprocating compressor rod packing replacement.

(B) December 10, 2025, for a reciprocating compressor rod packing that has not yet been replaced.

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

(c) - (d) [Not applicable because there are no centrifugal compressors at this facility.]

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

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

(2) For a centrifugal compressor, maintain the records under § 129.130(f) and submit the reports under § 129.130(k)(3)(v).

[Source: The provisions of this § 129.126 added December 9, 2022, effective December 10, 2022, 52 Pa.B. 7587.]

VII. ADDITIONAL REQUIREMENTS.**# 006 [25 Pa. Code §129.121]****General provisions and applicability**

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

(1) Storage vessels at:

(i) An unconventional well site.

(ii) A gathering and boosting station.

(iii) A natural gas processing plant.

(iv) The natural gas transmission and storage segment.

(2) Natural gas-driven continuous bleed pneumatic controllers.

(3) Natural gas-driven diaphragm pumps.

(4) Reciprocating compressors and centrifugal compressors.

(5) Fugitive emissions components.

(b) Existing RACT permit. Compliance with the requirements of this section and § § 129.122 -- 129.130 assures compliance with the requirements of a permit issued under § § 129.91 -- 129.95 (relating to stationary sources of NO_x and VOCs) or § § 129.96 -- 129.100 (relating to additional RACT requirements for major sources of NO_x and VOCs) to the owner or operator of a source subject to subsection (a) prior to December 10, 2022, to control, reduce or minimize VOC emissions from oil and natural gas sources listed in subsection (a), except to the extent the operating permit contains more stringent requirements.

[Source: The provisions of this § 129.121 added December 9, 2022, effective December 10, 2022, 52 Pa.B. 7587.]

007 [25 Pa. Code §129.122]**Definitions, acronyms and EPA methods**

[Selected definitions from 25 Pa. Code § 129.122 are printed below. Refer to regulation for remaining definitions. A copy of the regulation is available at this web address:

<https://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/025/chapter129/s129.132.html&d=reduce>]

(a) Definitions and acronyms. The following words and terms, when used in this section, § § 129.121 (relating to general provisions and applicability) and 129.123 -- 129.130, have the following meanings, unless the context clearly indicates otherwise:

AVO -- Audible, visual and olfactory.

**SECTION E. Source Group Restrictions.**

Bleed rate -- The rate in standard cubic feet per hour at which natural gas is continuously vented from a natural gas-driven continuous bleed pneumatic controller.

Closed vent system -- A system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector --

(i) A flanged fitting, screwed fitting or other joined fitting used to connect two pipes or a pipe and a piece of process equipment or that closes an opening in a pipe that could be connected to another pipe.

(ii) The term does not include a joined fitting welded completely around the circumference of the interface.

Deviation -- An instance in which the owner or operator of a source subject to this section, § 129.121 and 129.123 -- 129.130 fails to meet one or more of the following:

(i) A requirement or an obligation established in this section, § 129.121 or § 129.123 -- 129.130, including an emission limit, operating limit or work practice standard.

(ii) A term or condition that is adopted to implement an applicable requirement in this section, § 129.121 or § 129.123 -- 129.130 and which is included in the operating permit for the affected source.

(iii) An emission limit, operating limit or work practice standard in this section, § 129.121 or § 129.123 -- 129.130 during startup, shutdown or malfunction, regardless of whether a failure is permitted by this section, § 129.121 or § 129.123 -- 129.130.

First attempt at repair -- For purposes of § 129.127 (relating to fugitive emissions components):

(i) An action using best practices taken to stop or reduce fugitive emissions to the atmosphere.

(ii) The term includes:

(A) Tightening bonnet bolts.

(B) Replacing bonnet bolts.

(C) Tightening packing gland nuts.

(D) Injecting lubricant into lubricated packing.

Fugitive emissions component --

(i) A piece of equipment that has the potential to emit fugitive emissions of VOC at a well site, a gathering and boosting station or a natural gas processing plant, including the following:

(A) A valve.

(B) A connector.

(C) A pressure relief device.

(D) An open-ended line.

(E) A flange.

(F) A compressor.

**SECTION E. Source Group Restrictions.**

(G) An instrument.

(H) A meter.

(I) A cover or closed vent system not subject to § 129.128 (relating to covers and closed vent systems).

(J) A thief hatch or other opening on a controlled storage vessel not subject to § 129.123 (relating to storage vessels).

(ii) The term does not include a device, such as a natural gas-driven continuous bleed pneumatic controller or a natural gas-driven diaphragm pump, that vents as part of normal operations if the gas is discharged from the device's vent.

LDAR -- Leak detection and repair.

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

(i) Through audible, visual or odorous evidence during an AVO inspection.

(ii) By OGI equipment calibrated according to § 129.127(h) (relating to fugitive emissions components).

(iii) With a concentration of 500 ppm or greater as methane or equivalent by a gas leak detector calibrated according to § 129.127(i).

(iv) Using an alternative leak detection method approved by the Department in § 129.127(c)(2)(ii)(C), (c)(3)(ii)(C) or (e)(2)(iii).

Maximum average daily throughput -- The single highest daily average throughput during the 30-day potential to emit evaluation period employing generally accepted methods.

Natural gas-driven diaphragm pump --

(i) A positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid.

(ii) The term does not include either of the following:

(A) A pump in which a fluid is displaced by a piston driven by a diaphragm.

(B) A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor.

OGI -- Optical gas imaging.

Open-ended valve or line -- A valve, except a safety relief valve, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Reciprocating compressor rod packing --

(i) A series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere.

(ii) Another mechanism that provides the same function.

VRU -- vapor recovery unit -- A device used to recover vapor and route it to a process, flow line or other equipment.

[Source: The provisions of this § 129.122 added December 9, 2022, effective December 10, 2022, 52 Pa.B. 7587.]

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
101	1775 BHP, CAT G3606TA, COMP ENG C-1, SN 4ZS01658		
Emission Limit		Pollutant	
47.000	PPMV	@ 15% O2 or 93% reduction. [Plan approval 10-381B]	CO
0.030	GRAMS/HP-Hr	[Plan approval 10-381B]	Formaldehyde
0.500	GRAMS/HP-Hr	[Plan approval 10-381B]	NOX
500.000	PPMV	dry basis [25 Pa Code 123.21]	SOX
0.040	gr/DRY FT3	[25 Pa Code 123.13]	TSP
0.200	GRAMS/HP-Hr	Defined as NMNEHC as propane excluding formaldehyde. [Plan approval 10-381B]	VOC
102	1775 BHP, CAT G3606TA, COMP ENG C-2, SN 4ZS01663		
Emission Limit		Pollutant	
47.000	PPMV	@ 15% O2 or 93% reduction. [Plan approval 10-381B]	CO
0.030	GRAMS/HP-Hr	[Plan approval 10-381B]	Formaldehyde
0.500	GRAMS/HP-Hr	[Plan approval 10-381B]	NOX
500.000	PPMV	dry basis [25 Pa Code 123.21]	SOX
0.040	gr/DRY FT3	[25 Pa Code 123.13]	TSP
0.200	GRAMS/HP-Hr	Defined as NMNEHC as propane excluding formaldehyde. [Plan approval 10-381B]	VOC
103	1775 BHP, CAT G3606TA, COMP ENG C-3, SN 4ZS01690		
Emission Limit		Pollutant	
47.000	PPMV	@ 15% O2 or 93% reduction. [Plan approval 10-381B]	CO
0.030	GRAMS/HP-Hr	[Plan approval 10-381B]	Formaldehyde
0.500	GRAMS/HP-Hr	[Plan approval 10-381B]	NOX
500.000	PPMV	dry basis [25 Pa Code 123.21]	SOX
0.040	gr/DRY FT3	[25 Pa Code 123.13]	TSP
0.200	GRAMS/HP-Hr	Defined as NMNEHC as propane excluding formaldehyde. [Plan approval 10-381B]	VOC
104	1775 BHP, CAT G3606TA, COMP ENG C-4, SN 4ZS00521		
Emission Limit		Pollutant	
47.000	PPMV	@ 15% O2 or 93% reduction. [Plan approval 10-381B]	CO
0.030	GRAMS/HP-Hr	[Plan approval 10-381B]	Formaldehyde
0.500	GRAMS/HP-Hr	[Plan approval 10-381B]	NOX
500.000	PPMV	dry basis [25 Pa Code 123.21]	SOX
0.040	gr/DRY FT3	[25 Pa Code 123.13]	TSP
0.200	GRAMS/HP-Hr	Defined as NMNEHC as propane excluding formaldehyde. [Plan approval 10-381B]	VOC
105	1775 BHP, CAT G3606TA, COMP ENG C-5, SN 4ZS00527		
Emission Limit		Pollutant	
47.000	PPMV	@ 15% O2 or 93% reduction. [Plan approval 10-381B]	CO
0.030	GRAMS/HP-Hr	[Plan approval 10-381B]	Formaldehyde

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
	0.500	GRAMS/HP-Hr	[Plan approval 10-381B]
	500.000	PPMV	dry basis [25 Pa Code 123.21]
	0.040	gr/DRY FT3	[25 Pa Code 123.13]
	0.200	GRAMS/HP-Hr	Defined as NMNEHC as propane excluding formaldehyde. [Plan approval 10-381B]
			NOX
			SOX
			TSP
			VOC
106	1775 BHP, CAT G3606TA, COMP ENG C-6, SN 4ZS01155		
Emission Limit		Pollutant	
47.000	PPMV	@ 15% O2 or 93% reduction. [Plan approval 10-381B]	CO
0.030	GRAMS/HP-Hr	[Plan approval 10-381B]	Formaldehyde
0.500	GRAMS/HP-Hr	[Plan approval 10-381B]	NOX
500.000	PPMV	dry basis [25 Pa Code 123.21]	SOX
0.040	gr/DRY FT3	[25 Pa Code 123.13]	TSP
0.200	GRAMS/HP-Hr	Defined as NMNEHC as propane excluding formaldehyde. [Plan approval 10-381B]	VOC
401	TEG DEHYDRATOR 104 MILLION SCFD		
Emission Limit		Pollutant	
7.460	Tons/Yr	[From plan approval 10-00381C] Calculated as a 12-month rolling total.	VOC

Site Emission Restriction Summary

Emission Limit		Pollutant
49.000	Tons/Yr	[Plan approval 10-00381C] Calculated as a 12-month rolling total.
		VOC

**SECTION H. Miscellaneous.****I. GENERAL INFORMATION**

(a) This facility is located at 40.8074098, -79.9795578. It is accessed from Rutledge Lane, west of Renfrew, PA. Rutledge Lane is accessed by navigating to the address of 277 Powder Mill Rd, Renfrew, PA 16053.

This facility is a NATURAL MINOR with respect to Potential Emissions of regulated air pollutants.

The following eFACTS ID's are assigned to this facility for this permit issuance:

Permit number: 10-00381
eFACTS Site Name: Mtn Gathering Forward Comp Sta
eFACTS APS ID: 936690
eFACTS Master Auth ID: 1175317
eFACTS Client ID: 280792
eFACTS Site ID: 763352
Primary Facility (PF) ID: 754279

(b) The Capacity/Throughput numbers listed in Section A, the Site Inventory List, and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. The actual enforceable emission and operating limits for each source, with the correct number of significant digits, are listed in Sections C, D, and E of this permit. The Emission Restriction Summary in Section G of this permit is for information purposes only and is not to be used to establish enforceable limits.

(c) Abbreviations used in this permit:

Schematics:

FML: Fuel material location
CU: Combustion Unit
PROC: Process
CNTL: Control device
STAC: Stack. The stack can represent either the emission point or fugitive emissions in a permit map.

Pollutants:

CO: Carbon Monoxide
NOx: Nitrogen Oxides
SOx: Sulfur Oxides
TSP: Total Suspended Particulate (includes both filterable and condensable)
PM10: Particulate Matter less than 10 microns
PM2.5: Particulate Matter less than 2.5 microns
VOC: Volatile Organic Compounds
HAP: Hazardous Air Pollutant

Source ID: Department assigned ID number for the source

Source Name: Department assigned name for the source

Capacity/Throughput: The maximum rated capacity or throughput for the source. The maximum rated capacity or throughput is not considered an enforceable limit. Enforceable limits are contained within the conditions of the permit.

Fuel/Material: The fuel/material assigned to SCC for the source

AIMS: Air Information Management System -- the DEP electronic database for permitting and emission reports

CFR: Code of Federal Regulations

CI: Combustion Ignition

CMS: Continuous Monitoring System

Department: Pennsylvania Department of Environmental Protection (the DEP)

eFacts: Environmental Facility Application Compliance Tracking System -- the DEP electronic database for inspection reports

ICE: Internal Combustion Engine

ICI: Industrial, Commercial, and Institutional

NCG: Non-condensable gas

NESHAP: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63)

NSPS: New Source Performance Standards (40 CFR Part 60)

NWRO: Northwest Regional Office of PA DEP

RFD: Request for Determination of Changes of Minor Significance & Exemption from plan approval.

**SECTION H. Miscellaneous.**

RICE: Reciprocating Internal Combustion Engine

SCC: Source Classification Code as defined by EPA

SI: Spark Ignition

Source: An air contamination source (25 Pa. Code § 121.1).

TRS: Total reduced sulfur emissions; comprises 4 pollutants: hydrogen sulfide (H₂S), methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.

(d) All reports, submittals, and other communications required by this permit shall be submitted electronically to the PA DEP Northwest Regional office located at the following address. Web addresses for electronic submittals to this office are below.

Bureau of Air Quality
Department of Environmental Protection
230 Chestnut Street
Meadville, PA 16335
814-332-6940 (phone)
814-332-6121 (fax)
Office Hours 8 a.m. - 4 p.m.
800-541-2050 (after hours)

(i) Spills and other emergencies should be reported immediately to DEP by telephone at 800-541-2050.

(ii) Submittals of Asbestos Abatement and Demolition/Renovation Notification Forms should be made via the Online Asbestos Notification System. Information and links are located at this web address:

<https://www.dep.pa.gov/Business/Air/BAQ/BusinessTopics/Pages/Asbestos.aspx>

(iii) Submittals of Annual emissions inventory, if required, must be made via the DEP's AES*Online secure website. Information and links are located at this web address:

<https://www.dep.pa.gov/Business/Air/BAQ/BusinessTopics/Emission/Pages/default.aspx>

(iv) Submittals pertaining to emissions testing, specifically test protocols and test reports, shall be made by emailing electronic copies submissions to both PSIMS Administration in Central Office and to Regional Office AQ Program at the following e-mail addresses:

CENTRAL OFFICE:
RA-EPstacktesting@pa.gov

NORTHWEST REGIONAL OFFICE:
RA-EPNWstacktesting@pa.gov

(v) The 15-day advance notifications of emissions testing dates and supplemental testing information shall be submitted directly to:

(1) the DEP's OnBase electronic upload website where it will be forwarded to the Northwest Regional Office Air Quality Inspector. Upload the written notification at this web address:

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

(2) IF the Protocol Reviewer at Central Office Division of Source Testing requested a copy of the notification, then submit a copy to the email address provided by the protocol reviewer.

(vi) Submittals of RFD's shall be made via the DEP's Greenport website at <https://greenport.pa.gov>

(vii) All other submittals to this office should be made via the DEP's OnBase electronic upload website at this web address:

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

(e) Submittals to the EPA are made to the EPA Region III office.

(1) The regional EPA address is:

Section Chief
U.S. Environmental Protection Agency Region III

**SECTION H. Miscellaneous.**

Enforcement and Compliance Assurance Division
Air Section (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

(2) Electronic compliance certifications should be sent to the EPA at the following email address. Include the following in the email subject line: name of facility, state, and Title V operating permit number.

R3_APD_Permits@epa.gov

II. INFORMATION SPECIFIC TO THIS PERMIT

(f) For the purpose of this permit, sources are described as follows.

(1) The compressors associated with the 6 compressor engines are described by the permittee as follows.

- (i) Source 101: 101COMP Ariel JGC-4 SN. F-38850 powered by 1775 BHP, CAT G3606TA, ENGINE C-1, SN 4ZS01658
- (ii) Source 102: 102COMP Ariel JGC-4 SN. F-38662 powered by 1775 BHP, CAT G3606TA, ENGINE C-2, SN 4ZS01663
- (iii) Source 103: 103COMP Ariel JGC-4 SN. F-39042 powered by 1775 BHP, CAT G3606TA, ENGINE C-3, SN 4ZS01690
- (iv) Source 104: 104COMP Ariel JGC-4 SN. F-22245 powered by 1775 BHP, CAT G3606TA, ENGINE C-4, SN 4ZS00521
- (v) Source 105: 105COMP Ariel JGC-4 SN. F-22484 powered by 1775 BHP, CAT G3606TA, ENGINE C-5, SN 4ZS00527
- (vi) Source 106: 106COMP Ariel JGC-4 SN. F-31649 powered by 1775 BHP, CAT G3606TA, ENGINE C-6, SN 4ZS01155

(2) Source 201, Heaters/Reboilers, consist of the following.

- (i) Line heater H-1 rated at 250,000 Btu/hr
- (ii) Line heater H-2 rated at 500,000 Btu/hr
- (iii) Line heater H-3 rated at 500,000 Btu/hr
- (iv) Dehydrater Reboiler RBDEHY1 rated at 2 million Btu/hr

(3) Source 301, Storage Tanks, was approved with plan approvals 10-381A & 10-381B and consists of the following:

- (i) T-001 Gun Barrel Tank which is a process tank, not a storage tank as defined in 40 CFR § 60.5430 of subpart OOOO;
- (ii) T-002, Condensate Storage Tank;
- (iii) T-003, Produced Water Storage Tank;
- (iv) T-004, Produced Water Storage Tank.

(4) Source 501, Pneumatic devices, consists of 1 intermittent bleed pneumatic controller which is not subject to 40 CFR Part 60 Subpart OOOO or to 25 Pa. Code §§ 129.121 through 121.130 because these regulations apply to continuous bleed pneumatic controllers [Reference 40 CFR § 60.5365(d) and 25 Pa. Code §129.121(a)(2).]

(5) Source 701, Fugitives, consists of potential leaks from components. This source consists of approximately 716 gas/vapor valves, 22 light oil valves, 8 water / light oil valves, 616 gas/vapor flanges, 121 light oil flanges, 23 water / light oil flanges, 229 gas/vapor connectors, 10 light oil connectors, 10 water / light oil connectors, 72 components from the "other" category, 49 gas/vapor open-ended lines and 20 water / light oil pumps.

(g) Permit history:

(1) This new State Only operating permit, effective March 19, 2018, was issued on March 19, 2018.

(2) This permit was administratively amended on March 17, 2022 to incorporate the change in mailing address, responsible official, and permit contact. The additional PA Alternate Contact is Ben Kissel - Regulatory Manager (724-549-8287) (bernhardt.kissel@exxonmobil.com). Melissa Breitenbach is the local permit contact (melissa.breitenbach@exxonmobil.com). Her telephone number is 724-831-9291. Her address and Ben's address is 190 Thorn Hill Road – Warrendale, PA 15086.

(3) This permit renewal, effective January 25, 2024, is issued January 25, 2024.

(4) This permit was administratively amended on May 15, 2025 to incorporate the requirements of plan approval 10-00381C.



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