





# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

### STATE ONLY OPERATING PERMIT

Issue Date: August 19, 2020 Effective Date: August 19, 2020

Expiration Date: August 18, 2025

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: 08-00032

Synthetic Minor

Federal Tax Id - Plant Code: 98-0381749-1

**Owner Information** 

Name: REPSOL OIL & GAS USA LLC

Mailing Address: 50 PENNWOOD PL

WARRENDALE, PA 15086-6512

**Plant Information** 

Plant: REPSOL OIL & GAS USA LLC/THOMAS COMP STA

Location: 08 Bradford County 08942 Troy Township

SIC Code: 1311 Mining - Crude Petroleum And Natural Gas

Responsible Official

Name: SHELDON LILLICO

Title: DIR. MARCELLUS BUS. UNIT

Phone: (724) 814 - 5300

**Permit Contact Person** 

Name: KRIS PERRITT

Title: SR ENVRMNTL SPCST Phone: (607) 731 - 4882

[Signature]

MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION



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

# Section A. Facility/Source Identification

Table of Contents Site Inventory List

# Section B. General State Only Requirements

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

### Section C. Site Level State Only Requirements

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

### Section D. Source Level State Only Requirements

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

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

### Section E. Source Group Restrictions

E-I: Restrictions





# **SECTION A. Table of Contents**

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

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

F-I: Restrictions

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

# Section G. Emission Restriction Summary

### Section H. Miscellaneous







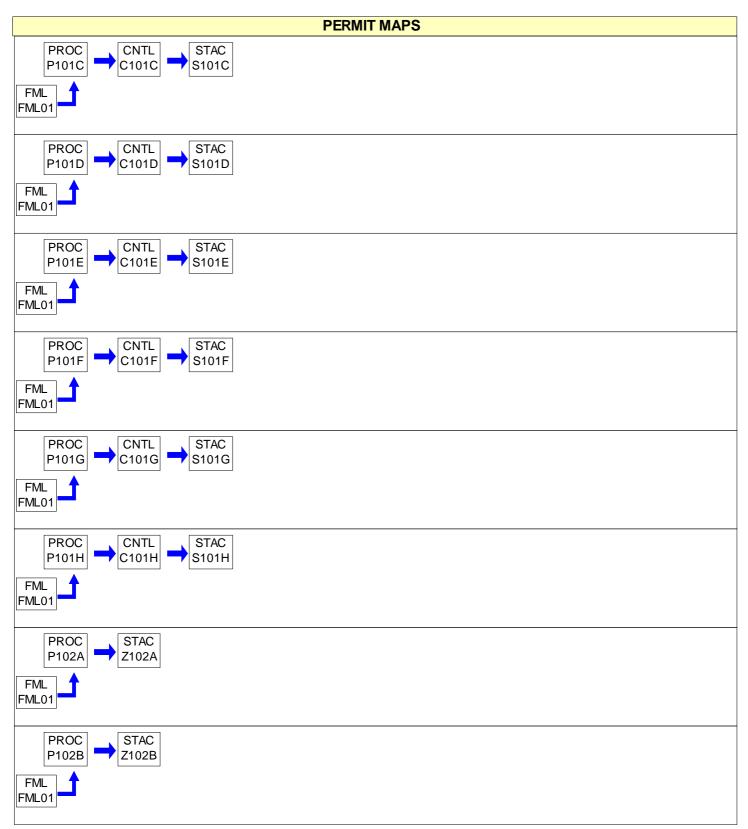
# **SECTION A.** Site Inventory List

Source II	D Source Name	Capacity/Throughput	Fuel/Material
P101A	COMPRESSOR ENGINE 1		
P101B	COMPRESSOR ENGINE 2		
P101C	COMPRESSOR ENGINE 3		
P101D	COMPRESSOR ENGINE 4		
P101E	COMPRESSOR ENGINE 5		
P101F	COMPRESSOR ENGINE 6		
P101G	COMPRESSOR ENGINE 7		
P101H	COMPRESSOR ENGINE 8		
P102A	UNIT 1 GLYCOL DEHYDRATOR RATED 35 MMSCF/DAY		
P102B	UNIT 2 GLYCOL DEHYDRATOR RATED 35 MMSCF/DAY		
C101A	OXIDATION CATALYST		
C101B	OXIDATION CATALYST		
C101C	OXIDATION CATALYST		
C101D	OXIDATION CATALYST		
C101E	OXIDATION CATALYST		
C101F	OXIDATION CATALYST		
C101G	OXIDATION CATALYST		
C101H	OXIDATION CATALYST		
FML01	NATURAL GAS LINE		
S101B	COMPRESSOR ENGINE 2 STACK		
S101C	COMPRESSOR ENGINE 1 STACK		
S101D	COMPRESSOR ENGINE 4 STACK		
S101E	COMPRESSOR ENGINE 5 STACK		
S101F	COMPRESSOR ENGINE 6 STACK		
S101G	COMPRESSOR ENGINE 7 STACK		
S101H	COMPRESSOR ENGINE 8 STACK		
Z102A	UNIT 1 GLYCOL DEHYDRATOR STACK		
Z102B	UNIT 2 GLYCOL DEHYDRATOR STACK		

### **PERMIT MAPS** PROC CNTL STAC C101A S101B P101A FML FML01 STAC PROC CNTL S101B P101B C101B FML FML01











#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)&(c)]

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 and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (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 fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,



modification, revision, renewal, and re-issuance of each operating permit or part thereof.

- (b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).
  - (1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.
  - (2) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.
- (c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund".

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

**Transfer of Operating Permits.** 

08-00032

- (a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.
- (b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.
- (c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

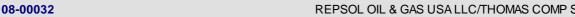
# #006 [25 Pa. Code § 127.441 and 35 P.S. § 4008] Inspection and Entry.

- (a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
  - (2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

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

Compliance Requirements.

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes





a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

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

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

**Duty to Provide Information.** 

- (a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.
- (b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#### #010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

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

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

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

**Operating Permit Modifications** 

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and



significant operating permit modifications, under this permit, as outlined below:

- (b) Administrative Amendments. The permittee shall make 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 make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

# #012 [25 Pa. Code § 127.441]

Severability Clause.

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

# #013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

- (a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:
  - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.
- (b) The Department may disapprove or condition de minimis emission increases at any time.
- (c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:



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

# #014 [25 Pa. Code § 127.3]

# Operational Flexibility.

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

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







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

#### #015 [25 Pa. Code § 127.11]

08-00032

### Reactivation

- (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

08-00032



# **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.



#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 §123.1]

### Prohibition of certain fugitive emissions

The permittee shall not permit the emission of fugitive air contaminants into the outdoor atmosphere 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) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.
- (8) Sources and classes of sources other than those identified above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
- (a) the emissions are of minor significance with respect to causing air pollution; and
- (b) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

### # 002 [25 Pa. Code §123.2]

### **Fugitive particulate matter**

The permittee shall not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in (1) through (8) in condition #001 above if the emissions are visible at the point the emissions pass outside the permittee's property.

# # 003 [25 Pa. Code §123.41]

### Limitations

The permittee shall not permit the emission of visible air contaminants into the outdoor atmosphere 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.

### # 004 [25 Pa. Code §123.42]

# **Exceptions**

The emission limitations of 25 Pa. Code Section 123.41 shall not apply when:

- (1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations:
- (2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions:
- (3) The emission results from sources specified in 25 Pa. Code Sections 123.1(a)(1) through (9).

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the permittee requesting this elective restriction]

- (a) The combined nitrogen oxides (expressed as NO2) emissions, from all sources at the facility, shall not equal or exceed 100 tons in any 12 consecutive month period.
- (b) The combined carbon monoxide emissions, from all sources at the facility, shall not equal or exceed 100 tons in any 12 consecutive month period.
- (c) The combined sulfur oxides (expressed as SO2) emissions, from all sources at the facility, shall not equal or exceed 100 tons in any 12 consecutive month period.
- (d) The combined particulate matter less than 10 microns in diameter (PM10) emissions, from all sources at the facility,



# **SECTION C.** Site Level Requirements

shall not equal or exceed 100 tons in any 12 consecutive month period.

- (e) The combined particulate matter less than 2.5 microns in diameter (PM2.5) emissions, from all sources at the facility, shall not equal or exceed 100 tons in any 12 consecutive month period.
- (f) The combined volatile organic compounds emissions, from all sources at the facility, shall not equal or exceed 50 tons in any 12 consecutive month period.
- (g) The emission of any single hazardous air pollutant, from all sources at the facility, shall not equal or exceed 10 tons in any 12 consecutive month period.
- (h) The emissions of any combination of hazardous air pollutants, from all sources at the facility, shall not equal or exceed 25 tons in any 12 consecutive month period.

### II. TESTING REQUIREMENTS.

# # 006 [25 Pa. Code §139.1]

# Sampling facilities.

Upon the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on such source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

# # 007 [25 Pa. Code §139.11] General requirements.

- (1) As specified in 25 Pa. Code Section 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.
- (2) As specified in 25 Pa. Code Section 139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum all of the following:
- (a) A thorough source description, including a description of any air cleaning devices and the flue.
- (b) Process conditions, for example, the charging rate of raw material or the rate of production of final product, boiler pressure, oven temperature and other conditions which may affect emissions from the process.
- (c) The location of the sampling ports.
- (d) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO2, O2 and N2), static and barometric pressures.
- (e) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (f) Laboratory procedures and results.
- (g) Calculated results.

# III. MONITORING REQUIREMENTS.

# # 008 [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.

### # 009 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the General Plan Approval and/or General Operating Permit



# **SECTION C.** Site Level Requirements

(BAQ-GPA/GP 5) for Natural Gas Compression and/or Processing Facilities; GP5-08-00032 authorized on January 26, 2018.]

- (a) The permittee shall, at a minimum, on a monthly basis perform a leak detection and repair (LDAR) program that includes audible, visual, and olfactory ("AVO") inspections.
- (b) Within 180 calendar days after the initial startup of a source, 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 a 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. 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.

### IV. RECORDKEEPING REQUIREMENTS.

# # 010 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the General Plan Approval and/or General Operating Permit (BAQ-GPA/GP 5) for Natural Gas Compression and/or Processing Facilities; GP5-08-00032 authorized on January 26, 2018]

The owner or operator of the facility shall maintain records that clearly demonstrate to the Department that the facility is not a Title V facility. In addition, the owner or operator of the facility shall keep records to verify compliance with the facility-wide emission limitations. The records shall be maintained at a minimum on a monthly basis and the emissions shall be calculated on a 12-month rolling sum. The records shall be retained for a minimum of five (5) years and shall be made available to the Department, upon request. The Department reserves the right to request additional information necessary to determine compliance.

# # 011 [25 Pa. Code §135.5]

# Recordkeeping

The permittee shall maintain such records including computerized records as may be necessary to comply with 25 Pa. Code Sections 135.3 and 135.21. 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.

All records generated pursuant to this condition shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

### V. REPORTING REQUIREMENTS.

### # 012 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by



# **SECTION C.** Site Level Requirements

08-00032

telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

- (c) The report shall describe the following:
- 1. name, permit or authorization number, and location of the facility,
- 2. nature and cause of the malfunction, emergency or incident,
- 3. date and time when the malfunction, emergency or incident was first observed,
- 4. expected duration of excess emissions,
- 5. estimated rate of emissions,
- 6. corrective actions or preventative measures taken.
- (d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.
- (e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.
- (f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.
- (g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

### # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit all requested reports in accordance with the Department's suggested format.

# # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the General Plan Approval and/or General Operating Permit (BAQ-GPA/GP 5) for Natural Gas Compression and/or Processing Facilities; GP5-08-00032 authorized on January 26, 2018]

The owner or operator of the facility shall annually submit to the Department a certification of compliance with the terms and conditions incorporated into this operating permit, for the previous year, including the applicable emission limitations, standards or work practices. The Compliance Certification Form provided by DEP shall be signed by a Responsible Official (as defined in Pa. Code §121.1). The Compliance Certification Form submitted to the DEP shall contain a certification as to truth, accuracy, and completeness consistent with the requirements of 25 Pa. Code §127.402(d). The Compliance Certification Form must be postmarked or hand-delivered to the appropriate DEP Regional Office, no later than March 1st each year for the previous calendar year. The Compliance Certification Form shall include:

- (i) The identification of each term or condition that is the basis of the certification.
- (ii) The compliance status.
- (iii) The methods used for determining the compliance status of the source, currently and over the reporting period.

# # 015 [25 Pa. Code §135.3]

# Reporting

(1) A person who owns or operates a source to which 25 Pa. Code Section 135 applies, and who has previously been advised by the Department to submit an annual Air Information Management Systems (AIMS) report, shall submit by March 1 of each year an annual AIMS report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified





#### SECTION C. **Site Level Requirements**

during the same period which were not previously reported.

- (2) A person who receives initial notification by the Department that an annual AIMS report is necessary shall submit an initial annual AIMS 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.
- (3) A source owner or operator may request an extension of time from the Department for the filing of an annual AIMS report, and the Department may grant the extension for reasonable cause.

### VI. WORK PRACTICE REQUIREMENTS.

#### # 016 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne from any source specified in (1) through (8) in condition #001 above. 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.

### VII. ADDITIONAL REQUIREMENTS.

#### # 017 [25 Pa. Code §121.7]

### Prohibition of air pollution.

The permittee shall not permit air pollution as that term is defined in the Pennsylvania Air Pollution Control Act (35 P.S. Sections 4001 through 4015).

#### # 018 [25 Pa. Code §123.31]

# Limitations

The permittee shall not permit the emission of any malodorous air contaminants into the outdoor atmosphere from any source in such a manner that the malodors are detectable outside the property of the permittee on whose land the source is being operated.

#### # 019 [25 Pa. Code §129.14]

### **Open burning operations**

The permittee shall not permit the open burning of material at the facility unless in accordance with 25 Pa. Code Section 129.14.

# 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.

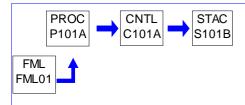
No compliance milestones exist.





Source ID: P101A Source Name: COMPRESSOR ENGINE 1

Source Capacity/Throughput:



### RESTRICTIONS.

# **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

#### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

#### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

#### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

[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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





# Fuel Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

### TESTING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

#### [25 Pa. Code §127.441] # 009

# Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.



(g) 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.

# # 010 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

# 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.

# # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

08-00032



# **SECTION D.** Source Level Requirements

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

# 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13] Subpart A--General Provisions

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

# # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Source ID P101A consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-1100) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.
- (b) ID C101A consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.





# 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.

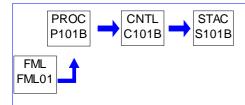
08-00032



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

Source ID: P101B Source Name: COMPRESSOR ENGINE 2

Source Capacity/Throughput:



### RESTRICTIONS.

# **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

#### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

#### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

#### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

[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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





# Fuel Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

### TESTING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

#### [25 Pa. Code §127.441] # 009

### Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.



(g) 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.

# # 010 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

# 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.

# # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.





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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13] **Subpart A--General Provisions** 

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U.S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

#### # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Source ID P101B consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-1200) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.
- (b) ID C101B consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.





# 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

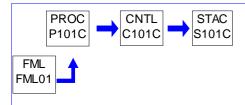
This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.





Source ID: P101C Source Name: COMPRESSOR ENGINE 3

Source Capacity/Throughput:



### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

# # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





# Fuel Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

### II. TESTING REQUIREMENTS.

# # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# # 009 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.



(g) 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.

# # 010 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

# 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.

# # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

08-00032 REPSOL OIL & GAS USA LLC/THOMAS COMP STA



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

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13] **Subpart A--General Provisions** 

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U.S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

#### # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Source ID P101C consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-1300) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.
- (b) ID C101C consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.



08-00032



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

# 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

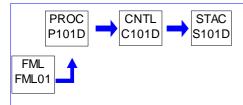
This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.





Source ID: P101D Source Name: COMPRESSOR ENGINE 4

Source Capacity/Throughput:



### RESTRICTIONS.

# **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

#### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

#### # 003 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the General Plan Approval and/or General Operating Permit (BAQ-GPA/GP 5) for Natural Gas Compression and/or Processing Facilities; GP5-08-00032 authorized on January 26, 2018.1

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.50 grams per brake horsepower-hour, 1.52 pounds per hour and 6.66 tons in any 12 consecutive month period,
- (b) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.25 grams per brake horsepower-hour, 0.76 pounds per hour and 3.33 tons in any 12 consecutive month period,
- (c) formaldehyde 0.05 grams per brake horsepower-hour, 0.15 pounds per hour and 0.67 tons in any 12 consecutive month period.

#### # 004 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

#### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

#### # 006 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the General Plan Approval and/or General Operating Permit (BAQ-GPA/GP 5) for Natural Gas Compression and/or Processing Facilities; GP5-08-00032 authorized on January 26,





2018.1

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

(a) carbon monoxide (CO) - 47 parts per million @ 15% O2, dry volume basis OR achieve at least 93% reduction, 0.52 pounds per hour and 2.27 tons in any 12 consecutive month period.

# 007 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).

# Fuel Restriction(s).

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

### II. TESTING REQUIREMENTS.

#### # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

#### # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:



- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (g) 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.

### # 011 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 012 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

#### 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.

# # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.



08-00032



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

- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

[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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

#### REPORTING REQUIREMENTS.

# 016 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13]

**Subpart A--General Provisions** 

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U.S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448





#### 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.

## # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Source ID P101D consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-1402) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.

(b) ID C101D consists of a Miratech oxidation catalyst, model ZHS-36x31-14-XH2B1.

# 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

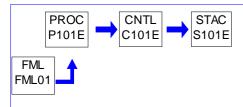
This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.





Source ID: P101E Source Name: COMPRESSOR ENGINE 5

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

### # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

## # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

## # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

## # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





## Fuel Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

#### II. TESTING REQUIREMENTS.

## # 008 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

## # 009 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.



(g) 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.

## # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

## 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.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.





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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

#### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13] **Subpart A--General Provisions** 

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U.S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

#### # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Source ID P101E consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-3100) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.
- (b) ID C101E consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.





# 018 [25 Pa. Code §127.441]

08-00032

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.

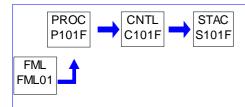
08-00032



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

Source ID: P101F Source Name: COMPRESSOR ENGINE 6

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

#### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

## # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





## Fuel Restriction(s).

08-00032

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

#### TESTING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

#### [25 Pa. Code §127.441] # 009

## Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.



(g) 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.

## # 010 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

## 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.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.





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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

#### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

# 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13] Subpart A--General Provisions

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

## # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Source ID P101F consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-3200) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.
- (b) ID C101F consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.



## # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

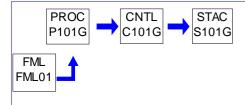
This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.





Source ID: P101G Source Name: COMPRESSOR ENGINE 7

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

#### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

## # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





## Fuel Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

#### II. TESTING REQUIREMENTS.

## # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

## # 009 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.





(g) 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.

## # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

## 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.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

08-00032



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

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

#### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

# 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13]

**Subpart A--General Provisions** 

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U. S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

## # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Source ID P101G consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-3300) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.

(b) ID C101G consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.



# 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

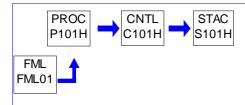
This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.





Source ID: P101H Source Name: COMPRESSOR ENGINE 8

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of the oxidation catalyst associated with this engine shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

#### # 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from the oxidation catalyst associated with this engine shall not exceed 500 parts per million, by volume, dry basis.

### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not permit the following air contaminant emissions from the exhaust of the oxidation catalyst associated with this engine in excess of the limitations listed below:

- (a) nitrogen oxides (NOx, expressed as NO2) 0.55 grams per brake horsepower-hour, 1.67 pounds per hour and 7.33 tons in any 12 consecutive month period,
- (b) carbon monoxide (CO) 0.255 grams per brake horsepower-hour, 0.78 pounds per hour and 3.40 tons in any 12 consecutive month period,
- (c) total combined volatile organic compounds (excluding formaldehyde) (VOC) 0.252 grams per brake horsepower-hour, 0.77 pounds per hour and 3.36 tons in any 12 consecutive month period,
- (d) formaldehyde 0.045 grams per brake horsepower-hour, 0.14 pounds per hour and 0.60 tons in any 12 consecutive month period.

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from the exhaust of the oxidation catalyst associated with this engine shall not equal or exceed 10% for a period or periods aggregating more than three minutes in any one hour and not equal or exceed 30% at any time.

### # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

At operating conditions less than rated capacity, this engine shall, on a pounds-per-hour basis, emit no more than emitted at rated bhp and rated speed.

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4233(e).





## Fuel Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel in this engine.

#### TESTING REQUIREMENTS.

#### # 008 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall perform nitrogen oxide (NOx, expressed as NO2), carbon monoxide, volatile organic compound and formaldehyde initial stack tests upon this engine within 180 days from the commencement of operation of this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, volatile organic compounds, and formaldehyde of the oxidation catalyst associated with this engine.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

#### [25 Pa. Code §127.441] # 009

## Operating permit terms and conditions.

- (a) Pursuant to 25 Pa. Code § 139.3, at least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One hardcopy and one electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one hardcopy and one electronic copy shall be sent to the Department's Source Testing Division in Harrisburg. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (b) Pursuant to 25 Pa. Code § 139.3, 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) Pursuant to 40 CFR § 60.8(a), 40 CFR § 61.13(f) and 40 CFR § 63.7(g), complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an EPA reference method test program.
- (d) Pursuant to 25 Pa. Code § 139.53(b) 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 noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
- 2. Permit number(s) and condition(s) which are the basis for the evaluation.
- 3. Summary of results with respect to each applicable permit condition.
- 4. Statement of compliance or non-compliance with each applicable permit condition.
- (e) 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.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.



(g) 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.

## # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall perform annual nitrogen oxide (NOx, expressed as NO2), carbon monoxide, and volatile organic compounds stack tests upon this engine to demonstrate compliance with the emission limitations for NOx, carbon monoxide, and volatile organic compounds of the oxidation catalyst associated with this engine. These annual stack tests shall be performed within one year of performing the initial stack tests and annually thereafter. At least six months prior to the expiration of this operating permit, the permittee shall perform a formaldehyde stack test upon this engine to demonstrate compliance with the formaldehyde emission limitation of the oxidation catalyst associated with this engine. The Department may require the permittee to perform more frequent stack testing for any air contaminant if the Department reasonably suspects that any of the air contaminants emitted from the oxidation catalyst associated with this engine are being emitted in excess of any of the air contaminant emission limitations.

- (a) The performance test shall consist of three (3) separate test runs and each run shall last at least one (1) hour in duration.
- (b) All testing is to be done using EPA reference method test procedures acceptable to the Department and all testing is to be performed while this engine is operating at +/- 10% of full load.

# 011 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4244.

## III. MONITORING REQUIREMENTS.

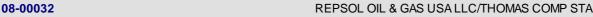
No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following information:
- (1) The date the engine commences operation.
- (2) The number of hours the engine operates each calendar year.
- (3) The amount of fuel used in the engine each calendar year.
- (4) The supporting calculations on a monthly basis used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine in any 12 consecutive month period.
- (5) The test reports which shall include a description of the testing methods, testing results used to verify compliance with the nitrogen oxide, carbon monoxide, volatile organic compound, and formaldehyde emission limitations for the engine, all engine operating data collected during the tests, and a copy of the report demonstrating that the engine was operating at rated bhp and rated speed conditions during performance testing.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.





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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4243(b)(2)(ii).

# 014 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

#### V. REPORTING REQUIREMENTS.

# 015 [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?

The permittee shall comply with the applicable requirements specified in 40 CFR Section 60.4245(a), (c), and (d).

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

**Subpart A--General Provisions** 

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

The submission of all requests, reports, applications, submittals and other communications required by 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675 and 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248 shall be submitted to both the U.S. Environmental Protection Agency and the Department. The Environmental Protection Agency copies may be sent to:

Director Air Protection Division (3AP00) U. S. EPA, Region III 1650 Arch Street Philadelphia, PA 19103-2029

and

The Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101 Williamsport, PA 17701-6448

#### 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.

#### # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) Source ID P101H consists of one natural gas-fired, Caterpillar Model G3516B, four (4) stroke lean burn (4SLB) reciprocating internal combustion engine (K-3400) rated at 1380 brake-horsepower equipped with low NOx electronic control technology.
- (b) ID C101H consists of a Miratech oxidation catalyst, model IQ-26-12-EH1.





#### # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon monoxide, volatile organic compounds, and formaldehyde emissions from each this engine shall be controlled by the oxidation catalyst. The permittee shall not operate this engine without the simultaneous operation of the engine's respective oxidation catalyst at any time.

# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 60 Subpart JJJJ, Sections 60.4230 through 60.4248. The permittee shall comply with all applicable requirements specified in 40 CFR Part 60 Subpart JJJJ Sections 60.4230 through 60.4248.

#### # 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

This engine is subject to the requirements of 40 CFR Part 63 Subpart ZZZZ, Sections 63.6580 through 63.6675. The permittee shall comply with all applicable requirements specified in 40 CFR Part 63 Subpart ZZZZ Sections 63.6580 through 63.6675.

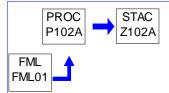
Page 58 DEP Auth ID: 1305427





Source ID: P102A Source Name: UNIT 1 GLYCOL DEHYDRATOR RATED 35 MMSCF/DAY

Source Capacity/Throughput:



#### RESTRICTIONS.

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

# 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of this glycol dehydrator shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

# 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from this glycol dehydrator shall not exceed 500 parts per million, by volume, dry basis.

#### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined volatile organic compounds emissions from this glycol dehydrator shall not exceed 1.10 tons in any 12 consecutive month period.

## Fuel Restriction(s).

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel for this glycol dehydrator.

#### TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.773]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.773.

#### IV. RECORDKEEPING REQUIREMENTS.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following for this source:
- (1) The number of hours per calendar year that this glycol dehydrator operated.

08-00032



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

- (2) The amount of fuel used per calendar year in this glycol dehydrator.
- (3) The supporting calculations on a monthly basis used to verify compliance with the volatile organic compound emission limitation for this glycol dehydrator in any 12 consecutive month period. The supporting calculations shall rely upon accurate up-to-date GRI-GLYCalc reports that utilize analyses accurately representative of the gas being processed by this glycol dehydrator.
- (4) The actual throughput per day and the glycol circulation rate for this glycol dehydrator.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

### # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.774]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.774.

#### V. REPORTING REQUIREMENTS.

## # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.775]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.775(c), (d), and (f).

#### 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.

### # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID P102A consists of a natural gas dehydration unit, rated at 35 million standard cubic feet per day, designated by the permittee as V-600.

#### # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.760]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.760(f)(6).

## # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.764]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.764(e)(1).

## # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.772]

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

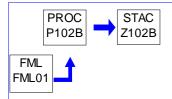
The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.772(b).





Source ID: P102B Source Name: UNIT 2 GLYCOL DEHYDRATOR RATED 35 MMSCF/DAY

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.13]

#### **Processes**

The concentration of particulate matter in the exhaust of this glycol dehydrator shall not exceed 0.04 grains per dry standard cubic foot of effluent gas volume.

# 002 [25 Pa. Code §123.21]

#### **General**

The concentration of sulfur oxides, expressed as sulfur dioxide (SO2), in the exhaust from this glycol dehydrator shall not exceed 500 parts per million, by volume, dry basis.

### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined volatile organic compounds emissions from this glycol dehydrator shall not exceed 1.10 tons in any 12 consecutive month period.

## Fuel Restriction(s).

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas as fuel for this glycol dehydrator.

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.773]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.773.

#### IV. RECORDKEEPING REQUIREMENTS.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The permittee shall keep comprehensive and accurate records of the following for this source:
- (1) The number of hours per calendar year that this glycol dehydrator operated.



- (2) The amount of fuel used per calendar year in this glycol dehydrator.
- (3) The supporting calculations on a monthly basis used to verify compliance with the volatile organic compound emission limitation for this glycol dehydrator in any 12 consecutive month period. The supporting calculations shall rely upon accurate up-to-date GRI-GLYCalc reports that utilize analyses accurately representative of the gas being processed by this glycol dehydrator.
- (4) The actual throughput per day and the glycol circulation rate for this glycol dehydrator.
- (b) All records generated pursuant to this condition shall be kept for a minimum of five (5) years and shall be made available to the Department upon request.

### # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.774]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.774.

#### V. REPORTING REQUIREMENTS.

## # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.775]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.775(c), (d), and (f).

#### 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.

### # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID P102B consists of a natural gas dehydration unit, rated at 35 million standard cubic feet per day, designated by the permittee as V-1600.

#### # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.760]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.760(f)(6).

## # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.764]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.764(e)(1).

## # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.772]

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

The permittee shall comply with the applicable requirements specified in 40 CFR Section 63.772(b).





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

No Source Groups exist for this permit.





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

No Alternative Operations exist for this permit.





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

No emission restrictions listed in this section of the permit.







## SECTION H. Miscellaneous.

- (a) The following air contaminant sources are considered to be insignificant emission sources and have been determined to be exempt from permit requirements. However, this determination does not exempt the sources from compliance with all applicable air quality regulations specified in 25 Pa. Code Chapters 121-145:
- (1) 250 barrel (10,500 gal) produced water tank
- (2) 150 barrel (6,300 gal) oil tank
- (3) 150 barrel (6,300 gal) water/glycol mix tank





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