





# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

# STATE ONLY OPERATING PERMIT

Issue Date:January 24, 2017Effective Date:August 5, 2020Revision Date:August 5, 2020Expiration Date:December 31, 2021

Revision Type: Amendment

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

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

State Only Permit No: 43-00366

Federal Tax Id - Plant Code: 25-0850705-57

## **Owner Information**

Name: NATL FUEL GAS SUPPLY CORP

Mailing Address: 6363 MAIN ST

WILLIAMSVILLE, NY 14221-5855

## Plant Information

Plant: NATL FUEL GAS SUPPLY CORP/MERCER COMP STA

Location: 43 Mercer County 43922 Jefferson Township

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

## Responsible Official

Name: MICHAEL J. BARBER

Title: ASSISTANT VICE PRESIDENT

Phone: (814) 871 - 8658

#### **Permit Contact Person**

Name: EMILY M. NUDING Title: ENGINEER III Phone: (716) 857 - 7742

[Signature]	
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ERIC A. GUSTAFSON, NORTHWEST REGION AIR PROGRAMMANAGER



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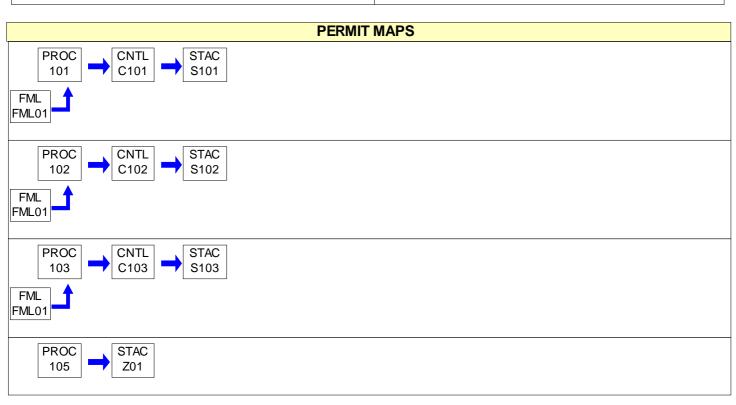
## Section H. Miscellaneous



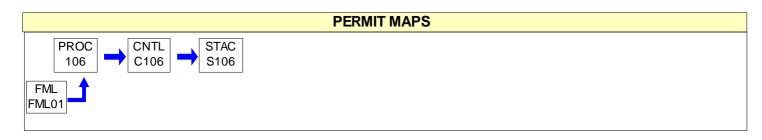


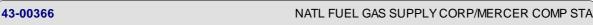
# SECTION A. Site Inventory List

Source	ID Source Name	Capacity/	Throughput	Fuel/Material
104A	EIGHT(8) NAT GAS FIRED CATALYTIC HEATERS, 0.07 MMBTU/HR EACH			
104B	FOUR(4) NAT GAS FIRED CATALYTIC HEATERS, 0.06 MMBTU/HR EACH			
101	CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT	12.750	MCF/HR	Natural Gas
102	CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT	12.750	MCF/HR	Natural Gas
103	CATERPILLAR EMERGENCY GEN, 3516LE, 1,053 BHP, W/ NSCR, AFRC	7.800	MCF/HR	Natural Gas
105	1,000 GALLON STORAGE VESSEL	0.183	CF/HR	
106	CATERPILLAR COMP. ENGINE, G3612 3,750 BHP, W/ OX CAT, AFRC	24.315	MCF/HR	Natural Gas
C101	OXIDATION CATALYST, CATERPILLAR G3606LE			
C102	OXIDATION CATALYST, CATERPILLAR G3606LE			
C103	NSCR, CATERPILLAR 3516LE			
C106	OXIDATION CATALYST, CATERPILLAR G3612			
FML01	NATURAL GAS			
S101	STACK: 101 CATERPILLAR COMP ENGINE, G3606LE, W/ OX CAT			
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S103	STACK: 103 CATERPILLAR EMERGENCY GEN, 3516LE, W/ NSCR, AFRC			
S106	STACK: 106 CATERPILLAR COMP ENGINE, G3612, W/ OX CAT			
Z01	FUGITIVE EMISSIONS			











#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.** 

- (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

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

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]

## 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





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

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

## Sampling, Testing and Monitoring Procedures.

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

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

#### Recordkeeping.

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

## #021 [25 Pa. Code § 127.441(a)]

## **Property Rights.**

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

## #022 [25 Pa. Code § 127.447]

# **Alternative Operating Scenarios.**

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





#023 [25 Pa. Code §135.3]

Reporting

- (a) If the facility is a Synthetic Minor Facility, the permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.
- (b) A source owner or operator of a Synthetic Minor Facility may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#024 [25 Pa. Code §135.4]

**Report Format** 

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



#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §121.7]

#### Prohibition of air pollution.

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

## # 002 [25 Pa. Code §123.1]

# Prohibition of certain fugitive emissions

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

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
  - (4) Clearing of land.
  - (5) Stockpiling of materials.
- (6) Sources and classes of sources other than those identified in above, for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

# # 003 [25 Pa. Code §123.13]

## **Processes**

The permittee may not permit the emission into the outdoor atmosphere of particulate matter, from any process at this facility, in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

# # 004 [25 Pa. Code §123.2]

# Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Section C - Condition #002 (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

#### # 005 [25 Pa. Code §123.21]

#### **General**

The permittee may not permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

## # 006 [25 Pa. Code §123.31]

#### Limitations

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

# # 007 [25 Pa. Code §123.42]

### **Exceptions**

The limitations of 25 Pa Code, Section 123.41 (relating to limitations of visible air contaminants) shall not apply to a





visible emission in any of the following instances:

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in Section C Condition #002 (relating to prohibition of certain fugitive emissions).

## # 008 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

[from Plan Approval 43-366B]

1. [25 Pa. Code Section 127.12(b)]

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

- a) Equal to or greater than 10% for a period or periods aggregating more than three minutes in any 1 hour.
- b) Equal to or greater than 30% at any time.

#### # 009 [25 Pa. Code §129.14]

#### **Open burning operations**

- (a) The permittee may not permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
  - (3) The emissions interfere with the reasonable enjoyment of life or property.
  - (4) The emissions cause damage to vegetation or property.
  - (5) The emissions are or may be deleterious to human or animal health.
  - (b) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
  - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
  - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
  - (4) A fire set solely for recreational or ceremonial purposes.
  - (5) A fire set solely for cooking food.
  - (c) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
    - (1) As used in this subsection the following terms shall have the following meanings:





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

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

- (2) Subsection (a) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:
- (i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.
- (ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.
- (3) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

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

#### II. TESTING REQUIREMENTS.

#### # 010 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

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

#### III. MONITORING REQUIREMENTS.

# # 011 [25 Pa. Code §123.43]

## **Measuring techniques**

Visible emissions may be measured using either of the following:

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

#### IV. RECORDKEEPING REQUIREMENTS.

#### # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

1. [25 Pa. Code Section 127.12(b)]

The permittee shall maintain all logs on-site for a period of five years and furnish these records to the Department upon request.

## # 013 [25 Pa. Code §135.5]

# Recordkeeping

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





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#### V. REPORTING REQUIREMENTS.

## # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

# 1. [25 Pa. Code Section 127.12(b)]

The owner/operator shall report annually each source's emissions of VOC and the VOC emissions total of all sources at the facility for the previous calendar year. This reporting shall be done in full compliance with those applicable provisions of 25 PA Code Chapter 135 regarding Emission Statements which are also cited in this plan approval.

National Fuel Gas Supply Corporation's emissions reporting submitted annually as required by the Department from owners and operators of certain natural gas related activities will satisfy the reporting requirements of this condition.

See PA Bulletin notice concerning natural gas industry emissions reporting:

http://www.pabulletin.com/secure/data/vol44/44-50/2564.html

## 2. [25 Pa. Code Section 127.12(b)]

At least five (5) business days prior to commencing operation of the source or facility, the owner or operator shall provide a written notification to the Department of the intent to commence operation of the natural gas compression and/or processing facility authorized by Plan Approval 43-366B. When multiple sources at the facility are subject to different commencement of operation schedules, written notice shall be submitted to DEP prior to the commencement of operation of each source.

#### 3. [25 Pa. Code Section 127.12(b)]

- (c) The owner or operator shall notify the Department, in writing, no later than five (5) business days after the following activities:
- (i) Initial commencement date of construction of the source(s) authorized under this plan approval.
- (ii) Any lapse in construction activity of eighteen (18) months or more that may take place in between the initial and start-up dates in (i) and (ii) above.

## 4. [25 Pa. Code Section 127.12(b)]

The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction which results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitation specified herein. Following the telephone notification, a written notice must also be submitted to DEP as specified below.

- (i) If the owner or operator is unable to provide notification by telephone to the appropriate Regional Office within twenty-four (24) hours of discovery of a malfunction due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first business day for the Department following the weekend or holiday.
- (ii) Any malfunction that poses an imminent danger to the public health, safety, welfare, or environment shall be reported by telephone to the Department and the County Emergency Management Agency immediately after the discovery of an incident. The owner or operator shall submit a written report of instances of such malfunctions to the Department within three (3) business days of the telephone report.
- (iii) Unless otherwise required by this plan approval, any other malfunctions shall be reported to the Department, in writing,





within five (5) business days of malfunction discovery.

# # 015 [25 Pa. Code §135.3]

## Reporting

- (a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified during the same period which were not previously reported.
- (b) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

## # 016 [25 Pa. Code §135.4]

## Report format

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

#### VI. WORK PRACTICE REQUIREMENTS.

## # 017 [25 Pa. Code §123.1]

# Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter emitted from a source identified in Section C - Condition #002, shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
  - (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

# # 018 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

[from Plan Approval 43-366B]

# 1. [25 Pa. Code Section 127.12(b)]

All sources shall be operated and maintained in such a manner that no owner or operator may permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source such that the malodors are detectable outside the property of the owner or operator on whose land the facility is being operated.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 019 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

[from Plan Approval 43-366B, modified April 6, 2016 as per settlement agreement]

1. [25 Pa. Code Section 127.12(b)] Plan Approval 43-366B replaces Plan Approval 43-366A. Plan Approval 43-366A expired on September 30, 2015.





- 2. [25 Pa. Code Section 127.12(b)] [Additional authority for this permit condition is also derived from 25 Pa. Code §§123.1, 123.31, 127.1, and 127.12]
- (a) Within 180 days after the start-up of an air contamination source, the permittee shall develop a leak detection and repair (LDAR) program and perform LDAR monitoring.
- (b) The LDAR monitoring must be conducted annually on each pump, valve, relief valve, flange, mechanical connector, storage vessel/storage tank (as provided in subsection 2(e), herein), and open ended line, if applicable, in natural gas or hydrocarbon liquids service using an optical gas imaging camera such as a FLIR camera or a gas leak detector capable of reading methane concentrations in air of 0% to 5% with an accuracy of +/- 0.2%.
- (c) The LDAR monitoring required by paragraph (b) is not required to be conducted on the following components:
- i) buried components;
- ii) components obstructed by equipment or piping that prevents access;
- iii) components insulated in a manner that prevents access to the component by a monitor;
- iv) components located such that access would be unsafe. "Unsafe access" includes, but is not limited to, access that would require close proximity to hazards such as high pressure gas pipelines, moving equipment, electrical lines, and locations that would expose personnel to excessive noise or vented gas releases or risk damage to equipment.
- (d) The permittee may request, in writing, the use of other leak detection monitoring devices to be approved, in writing, by the Department. Such LDAR monitoring equipment shall be operated in accordance with manufacturer-recommended procedures and, where applicable, Method 21 as specified in 40 CFR Part 60, Appendix A. Each LDAR monitoring device shall be calibrated before use on each day of its use by following the manufacturer-recommended procedures or the procedure set forth at Method 21 specified in 40 CFR Part 60, Appendix A.
- (e) [Not applicable]
- (f) Leak means:
- i) Any emissions imaged by the optical gas instruments;
- ii) Indications of liquids dripping, excluding lube oil;
- iii) Indications by a sensor that a seal or barrier fluid system has failed;
- iv) Indication of bubbles when using soap solution; or
- v) Screening results, using a gas leak detector or representative gas analysis, exceeding 25,000 ppm (2.5%) methane and/or 500 ppm (0.05%) of VOCs.
- (g) The following is not considered a Leak:
- i) Any leak meeting the definition of a Leak contained in this Condition No. 019, paragraphs 2(f)(i) through (f)(v), above, that is later determined by screening results less than or equal to 25,000 ppm (2.5%) methane and/or 500 ppm (0.05%) VOCs.
- ii) A release from any equipment or component designed by the manufacturer to protect the equipment, controller(s), safety of personnel, to prevent groundwater contamination, to prevent gas migration, or an emergency situation.
- (h) Leaks shall be repaired no later than fifteen (15) calendar days after a Leak is detected, unless one or more of the following conditions is satisfied:
- i) Repair Requires Process Unit or Facility Shutdown If the repair of any component is technically infeasible without a





process unit or Facility shut down or if the source cannot be repaired during operation of the source, delay of repair is permitted and repair is required upon next scheduled shutdown of the process unit, source or Facility, as applicable.

- ii) Equipment Isolated From Process If the repair is unnecessary because the equipment is isolated from the process (i.e., the component/equipment is taken out of gas service, and repair is completed before a return to service), delay of repair is permitted until the return of the equipment to the process.
- iii) Valves Where Purged Gas Would Exceed Leaking Gas If immediate repair of the equipment would result in vented emissions (from equipment purge) being greater than the emissions resulting from delay of repair, then the delayed repair shall be permitted until the next scheduled shut down.
- iv) Valves Where Leakage Is Controlled If leaked gas is collected and destroyed or recovered in a control device, then the delayed repair is permitted.
- v) Component Is Inaccessible If the next scheduled unit or facility shutdown makes the component accessible, component shall be monitored and, if appropriate, repaired at that time.
- vi) Equipment/Component Is Under Warranty If a repair cannot be made due to warranty repair delays, delay of repair is permitted. The repair shall be completed when the warranty repair delay has been alleviated.
- vii) Parts Must Be Ordered If parts must be ordered, the operator will use its best efforts to expeditiously obtain and install such parts, and accurately estimate the extension of time needed to acquire parts and complete the repair.
- (i) If a Leak cannot be repaired within fifteen (15) calendar days after it is detected due to any of the conditions enumerated in subparagraphs (2)(h)(i)-(vii), above, the leaking equipment or component must be listed on a Delay of Repair (DOR) List and the owner or operator must submit a written notification request to the appropriate regional office requesting an extension of the fifteen (15) calendar day repair deadline.
- (j) If the operator complies with the following procedure, its written request for an extension of time to repair the Leak will be deemed approved, unless the Department objects within fifteen (15) calendar days of receiving the request on the grounds that the owner or operator has not met the requirements of the conditions enumerated in (2)(h)(i)-(vii). If the Department objects in accordance with this Paragraph j, the operator will have ten (10) additional business days to fully-address or cure the Department's initial objection:
- i) The written request for extension shall include the reason(s) for the extension request and the schedule for completion of the repairs.
- ii) If parts must be ordered, the operator will use its best efforts to expeditiously obtain and install such parts, and accurately estimate the extension of time needed to acquire parts and complete the repair. If a shutdown of the facility is necessary, the operator will complete the repairs during the next scheduled shutdown and inform the Department of this schedule.
- iii) The operator sends the written request and accompanying Materials addressed to the regional Air Quality program manager via certified mail, overnight mail (with confirmed delivery), receipted electronic mail, or other delivery method approved by the Department.
- iv) The operator may seek an additional extension based on a change in circumstances, using the above procedures.
- (k) A Leak is considered repaired if it is adjusted or otherwise altered and one of the following can be demonstrated after such adjustment or alteration:
- i) The component or equipment shows no detectable emissions consistent with EPA Method 21 specified in 40 CFR Part 60, Appendix A;
- ii) A concentration of 25,000 ppm (2.5%) methane or less using a gas leak detector and a VOC concentration of 500 ppm or less;





- iii) No visible leak image when using an optical gas imaging camera;
- iv) No bubbling at leak interface using a soap solution bubble test specified in EPA Method 21; or a procedure based on the formation of bubble in a soap solution that is sprayed on a potential leak source may be used for those sources that do not have continuously moving parts and that do not have a surface temperature greater than the boiling point or less than the freezing point of the soap solution;
- v) Audible, visual, and olfactory (AVO) inspection confirms the repair when the leak was detected using AVO; or
- vi) Any other method approved, in writing, by the Department.
- (I) The permittee shall, at a minimum on a monthly basis perform AVO inspection to detect Leaks from the equipment listed in this Condition No. 019, paragraph 2(b), above.
- (m) The permittee shall conduct monthly walk-around inspections during daylight hours and while the facility is operating. Monthly inspections are performed to detect for: (1) the presence of visible emissions; (2) the presence of visible fugitive air contaminants; (3) the presence of audible fugitive air contaminants; and (4) the presence of malodors beyond the boundaries of the facility.
- (n) The detected visible emissions and, audible or olfactible fugitive air contaminants shall be repaired no later than fifteen (15) calendar days after a Leak is detected in accordance with this Condition No. 019 paragraphs (2)(h), (i), and (j) above.
- (o) The permittee shall maintain a log for the results of each monthly AVO inspection, including the date of each inspection performance and the name of the company representative performing the inspection.
- (p) The permittee shall maintain all LDAR monitoring data (excluding video records), including calibration data, identification of leaking components, date of Leak discovery, date of each attempted repair and date of final repair.
- (q) All information generated to satisfy this recordkeeping condition shall be kept for a minimum of five years and shall be made available to the Department upon request.
- (r) The Permittee shall maintain such records, including computerized records, as may be necessary to comply with 25 Pa. Code §§135.3 and 135.21. These may include records of production, fuel usage, equipment maintenance or other information determined by the Department to be necessary for identification and quantification of air contaminant emissions.

## 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: 104A Source Name: EIGHT(8) NAT GAS FIRED CATALYTIC HEATERS, 0.07 MMBTU/HR EACH

Source Capacity/Throughput:

#### I. RESTRICTIONS.

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

#### II. TESTING REQUIREMENTS.

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

## III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

## VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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



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# **SECTION D.** Source Level Requirements

Source ID: 104B Source Name: FOUR(4) NAT GAS FIRED CATALYTIC HEATERS, 0.06 MMBTU/HR EACH

Source Capacity/Throughput:

#### I. RESTRICTIONS.

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

#### II. TESTING REQUIREMENTS.

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

## III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

## VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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





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# **SECTION D.** Source Level Requirements

Source ID: 101 Source Name: CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT

Source Capacity/Throughput: 12.750 MCF/HR Natural Gas

Conditions for this source occur in the following groups: COMPRESSOR ENGINES 101 & 102



## I. RESTRICTIONS.

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

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

# V. REPORTING REQUIREMENTS.

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

## VI. WORK PRACTICE REQUIREMENTS.

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

## VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 102 Source Name: CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT

Source Capacity/Throughput: 12.750 MCF/HR Natural Gas

Conditions for this source occur in the following groups: COMPRESSOR ENGINES 101 & 102



## I. RESTRICTIONS.

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

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

# V. REPORTING REQUIREMENTS.

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

## VI. WORK PRACTICE REQUIREMENTS.

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

## VII. ADDITIONAL REQUIREMENTS.

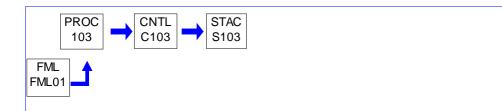
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).





Source ID: 103 Source Name: CATERPILLAR EMERGENCY GEN, 3516LE, 1,053 BHP, W/ NSCR, AFRC

> Source Capacity/Throughput: 7.800 MCF/HR Natural Gas



#### RESTRICTIONS.

# **Emission Restriction(s).**

# 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

1) [25 Pa. Code Section 127.12(b)]

Emissions of air contaminates from the generator engine into the atmosphere shall not exceed the following:

- a) NOx: 0.20 g/bhp-hr
- b) CO: 0.30 g/bhp-hr
- c) VOC: 0.20 g/bhp-hr\*
- d) HCHO: 0.012 g/bhp-hr

#### **TESTING REQUIREMENTS.**

# 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1) Within 60 days after achieving the maximum production rate at which the engine will be operated but no later than 180 days after startup, stack tests for NOx, CO, HCHO, and VOC (NMNEHC) shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection. The stack tests shall be performed on each engine while the aforementioned source is operating within 10 percent of 100 percent peak (or the highest achievable) load as stated in the application. The Department shall be furnished the results of the test in a written report.
- 2) At least thirty (30) calendar days prior to commencing an emission testing program to demonstrate compliance required by Plan Approval 43-366B, a Test Protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office for review and approval. The Test Protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- 3) At least fifteen (15) calendar days prior to commencing an emission testing program to demonstrate compliance required by Plan Approval 43-366B, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Notification, in writing, shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing

and Monitoring, so that an observer may be present. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing.

4) Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program to

<sup>\*</sup> As defined by 40 CFR 51.100(s) excluding HCHO



demonstrate compliance required by Plan Approval 43-366B, if a complete test report has not yet been submitted, an electronic notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

- 5) A complete test report shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program required by Plan Approval 43-366B.
- 6) The complete test report shall include a summary of the emission results at the beginning of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (a) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - (b) Permit number(s) and condition(s) which are the basis for the evaluation.
  - (c) Summary of results with respect to each applicable permit condition.
  - (d) Statement of compliance or non-compliance with each applicable permit condition.
- 7) All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- 8) All testing with the exception of periodic monitoring shall be performed in accordance with any applicable federal regulations (such as New Source Performance Standards), 25 Pa. Code, Chapter 139, and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The owner or operator of the facility shall use the following federal reference methods or alternative test methods approved, in writing, by the Department to demonstrate compliance:
- 40 CFR Part 60, Appendix A, Method 7E or 40 CFR Part 63, Appendix A, Method 320 shall be used to determine the nitrogen oxide (NOx) emissions.
- 40 CFR Part 60, Appendix A, Method 10 or 40 CFR Part 63, Appendix A, Method 320 shall be used to determine the carbon monoxide (CO) emissions.
- 40 CFR Part 60 Methods 25A and 18 or 40 CFR Part 60 Method 25A and 40 CFR Part 63 Method 320 shall be used to determine the NonMethane Non- Ethane Hydrocarbon (NMNEHC) emissions.
- 40 CFR Part 63 Appendix A, Method 320 or Method 328 shall be used to determine the Formaldehyde (HCHO) emissions.
- 9) Reports, protocols and test completion notification with the exception of periodic monitoring data shall be submitted through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal is not feasible, copies of the submittal shall be sent to the appropriate Pennsylvania Department of Environmental Protection Regional Office (Air Quality Program, 230 Chestnut Street, Meadville, PA 16335) and to the attention of the Department's Bureau of Air Quality, Division of Source Testing and Monitoring (400 Market Street, 12th Floor Rachel Carson State Office Building, Harrisburg, PA 17105-8468), with deadlines verified through document postmarks.
- 10) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the owner or operator shall comply with the most stringent provision, term, condition, method or rule.
- 11) Actions Related to Noncompliance Demonstrated by a Stack Test:
- (a) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test



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

(b) If the results of the required stack test exceed any limit defined in Plan Approval 43-366B, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the plan approval, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the plan approval, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the plan approval may be grounds for immediate revocation of the plan approval to operate the affected source.

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1. All maintenance and testing performed on the non-selective catalytic reduction/three-way catalyst shall be recorded in a log. This record shall, at a minimum, include:
- a) Time and date of maintenance / testing
- b) Name, title, and signature of the person performing the maintenance / testing
- c) A detailed description of the maintenance / testing
- d) Any corrective action taken as result of the maintenance / testing
- 2. All maintenance and testing performed on the engine shall be recorded in a log. This record shall, at a minimum, include:
- a) Time and date of maintenance / testing
- b) Name, title, and signature of the person performing the maintenance / testing
- c) A detailed description of the maintenance / testing
- d) Any corrective action taken as result of the maintenance / testing
- 3. The owner or operator of the facility shall keep records which clearly verify compliance with the emission restrictions of this plan approval.
- 4. The owner or operator shall maintain comprehensive accurate records of the number of hours per month that each engine operated, the amount of each fuel type that is used per month in each engine, records to demonstrate that all performance testing and periodic monitoring requirements are fulfilled, the date construction began, the date of initial startup, and the date testing was performed for each engine.

#### V. REPORTING REQUIREMENTS.

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





### VI. WORK PRACTICE REQUIREMENTS.

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

[from Plan Approval 43-366B]

- 1. The engine shall be operated and maintained as prescribed by the manufacturer. A copy of the engine's operational and maintenance literature shall be readily available and provided to the Department upon request.
- 2. The non-selective catalytic reduction/three-way catalyst shall be operated and maintained as prescribed by the manufacturer. A copy of the catalyst's operational and maintenance literature shall be readily available and provided to the Department upon request. A copy of the catalyst's warranty/guarantee literature shall be readily available and provided to the Department upon request.
- 3.
- (1) Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year is prohibited. There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) (iii) [Not applicable]
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) of this section. Except as provided in paragraph (3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed.
- 4. The engine shall not be operated more than 500 hours per year as calculated from a twelve month rolling total.

#### VII. ADDITIONAL REQUIREMENTS.

# 005 [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?



[Subpart JJJJ added and reserved at 71 FR 38497, July 6, 2006; text added at 73 FR 3591, Jan. 18, 2008; amended at 76 FR 37972, June 28, 2011]

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) (3) [Does not apply]

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- (4) Owners and operators of stationary SIICE that commence construction after June 12, 2006, where the stationary SIICE are manufactured:
- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (ii) (iii) [Does not apply]
- (iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).
- (5) [Does not apply]
- (6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.
- (b) (d) [Does not apply]
- (e) (f) [Does not apply]
- # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]
  Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
  What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?
- (a) (d) [Does not apply]
- (e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.
- (f) (h) [Does not apply]

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

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

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

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4236] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What is the deadline for importing or installing stationary SI ICE produced in the previous model year?



- (a) (b) [Does not apply]
- (c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.
- (d) (e) [Does not apply]

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) [Does not apply]
- (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
- (1) [Does not apply]
- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
- (i) [Does not apply]
- (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
- (c) [Does not apply]
- (d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) (iii) [Not applicable]



- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- (ii) [Reserved]
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.
- (f) [Does not apply]
- (g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
- (h) (i) [Does not apply]

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

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

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

- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a



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performance test; however, you must conduct the performance test immediately upon startup of the engine.

- (c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:
- ER = [Refer to §60.4244 for formula and exact notation] (Eq.1)

#### Where:

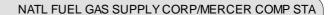
- ER = Emission rate of NOX in g/HP-hr.
- Cd = Measured NOX concentration in parts per million by volume (ppmv).
- $1.912 \times 10-3 =$ Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.
- Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
- T = Time of test run, in hours.
- HP-hr = Brake work of the engine, horsepower-hour (HP-hr).
- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:
- ER = [Refer to §60.4244 for formula and exact notation] (Eq.2)

## Where:

- ER = Emission rate of CO in g/HP-hr.
- Cd = Measured CO concentration in ppmv.
- 1.164 x 10-3 = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.
- Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
- T = Time of test run, in hours.
- HP-hr = Brake work of the engine, in HP-hr.
- (f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:
- ER = [Refer to §60.4244 for formula and exact notation] (Eq.3)

# Where:

- ER = Emission rate of VOC in g/HP-hr.
- Cd = VOC concentration measured as propane in ppmv.





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

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

T = Time of test run, in hours.

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

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

RFi = [Refer to §60.4244 for formula and exact notation] (Eq.4)

#### Where:

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

CMi = Measured concentration of compound i in ppmv as carbon.

CAi = True concentration of compound i in ppmv as carbon.

C icorr = [Refer to §60.4244 for formula and exact notation] (Eq.5)

#### Where:

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

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

CPeq = [Refer to §60.4244 for formula and exact notation] (Eq.6)

## Where:

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

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

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

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) [Does not apply]



- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
- (b) [Does not apply]
- (c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.
- (d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
- (e) [Does not apply]

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016]

# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

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

# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What definitions apply to this subpart?

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.
- (2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4243(d).



(3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4243(d)(2)(ii) or (iii) and §60.4243(d)(3)(i).

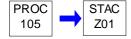
Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NOX(such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.





Source ID: 105 Source Name: 1.000 GALLON STORAGE VESSEL

> Source Capacity/Throughput: 0.183 CF/HR



#### RESTRICTIONS.

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

#### TESTING REQUIREMENTS.

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

#### MONITORING REQUIREMENTS. III.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

#### REPORTING REQUIREMENTS.

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

#### WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

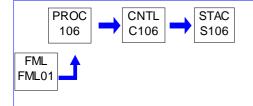
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).





Source ID: 106 Source Name: CATERPILLAR COMP. ENGINE, G3612 3,750 BHP, W/ OX CAT, AFRC

Source Capacity/Throughput: 24.315 MCF/HR Natural Gas



#### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

Emissions of air contaminates from each natural gas compressor engine into the atmosphere shall not exceed the following:

- a) NOx: 0.50 g/bhp-hr, 4.13 lbs./hr, 18.11 tpy\*
- b) CO: 0.33 g/bhp-hr, 2.73 lbs./hr, 11.95 tpy\*
- c) VOC\*\*: 0.25 g/bhp-hr, 2.07 lbs./hr, 9.05 tpy\*
- d) HCHO: 0.05 g/bhp-hr, 0.41 lbs./hr, 1.81 tpy\*

\*as calculated from a twelve month rolling total

\*\* As defined by 40 CFR 51.100(s) excluding HCHO

#### II. TESTING REQUIREMENTS.

#### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 43-366B]

- 1) Within 60 days after achieving the maximum production rate at which the engine will be operated but no later than 180 days after startup, stack tests for NOx, CO, HCHO, and VOC (NMNEHC) shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection. The stack tests shall be performed on each engine while the aforementioned source is operating within 10 percent of 100 percent peak (or the highest achievable) load as stated in the application. The Department shall be furnished the results of the test in a written report.
- 2) At least thirty (30) calendar days prior to commencing an emission testing program to demonstrate compliance required by Plan Approval 43-366B, a Test Protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office for review and approval. The Test Protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- 3) At least fifteen (15) calendar days prior to commencing an emission testing program to demonstrate compliance required by Plan Approval 43-366B, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Notification, in writing, shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing
- and Monitoring, so that an observer may be present. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing.
- 4) Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program to



demonstrate compliance required by Plan Approval 43-366B, if a complete test report has not yet been submitted, an electronic notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

- 5) A complete test report shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program required by Plan Approval 43-366B.
- 6) The complete test report shall include a summary of the emission results at the beginning of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (a) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - (b) Permit number(s) and condition(s) which are the basis for the evaluation.
  - (c) Summary of results with respect to each applicable permit condition.
  - (d) Statement of compliance or non-compliance with each applicable permit condition.
- 7) All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- 8) All testing with the exception of periodic monitoring shall be performed in accordance with any applicable federal regulations (such as New Source Performance Standards), 25 Pa. Code, Chapter 139, and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The owner or operator of the facility shall use the following federal reference methods or alternative test methods approved, in writing, by the Department to demonstrate compliance:
- 40 CFR Part 60, Appendix A, Method 7E or 40 CFR Part 63, Appendix A, Method 320 shall be used to determine the nitrogen oxide (NOx) emissions.
- 40 CFR Part 60, Appendix A, Method 10 or 40 CFR Part 63, Appendix A, Method 320 shall be used to determine the carbon monoxide (CO) emissions.
- 40 CFR Part 60 Methods 25A and 18 or 40 CFR Part 60 Method 25A and 40 CFR Part 63 Method 320 shall be used to determine the NonMethane Non- Ethane Hydrocarbon (NMNEHC) emissions.
- 40 CFR Part 63 Appendix A, Method 320 or Method 328 shall be used to determine the Formaldehyde (HCHO) emissions.
- 9) Reports, protocols and test completion notification with the exception of periodic monitoring data shall be submitted through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal is not feasible, copies of the submittal shall be sent to the appropriate Pennsylvania Department of Environmental Protection Regional Office (Air Quality Program, 230 Chestnut Street, Meadville, PA 16335) and to the attention of the Department's Bureau of Air Quality, Division of Source Testing and Monitoring (400 Market Street, 12th Floor Rachel Carson State Office Building, Harrisburg, PA 17105-8468), with deadlines verified through document postmarks.
- 10) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the owner or operator shall comply with the most stringent provision, term, condition, method or rule.
- 11) Actions Related to Noncompliance Demonstrated by a Stack Test:
- (a) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test



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

- (b) If the results of the required stack test exceed any limit defined in Plan Approval 43-366B, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the plan approval, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the plan approval, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the plan approval may be grounds for immediate revocation of the plan approval to operate the affected source.
- 12) In addition to the source testing required by Conditions 1-11 of this Section, semi-annually (but no sooner than sixty (60) days from the previous test and no later than 3 years from the previous test), the owner or operator shall perform periodic monitoring for NOx and CO emissions to verify continued compliance upon each of the respective engines. A Department-approved test that has been performed within 60 days prior to the scheduled periodic monitoring may be used in lieu of the periodic monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three test runs of twenty (20) minutes for each test run. The Department may alter the frequency of portable analyzer tests based on the test results. The frequency of portable gas analyzer tests may be altered with written Departmental approval. The portable gas analyzer shall be used and maintained according to the manufacturer's specifications and the procedures specified in ASTM D 6522 or equivalent as approved by the Department.

## III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1. All maintenance and testing performed on the oxidation catalyst shall be recorded in a log. This record shall, at a minimum, include:
- a) Time and date of maintenance / testing
- b) Name, title, and signature of the person performing the maintenance / testing
- c) A detailed description of the maintenance / testing
- d) Any corrective action taken as result of the maintenance / testing
- 2. All maintenance and testing performed on the engine shall be recorded in a log. This record shall, at a minimum, include:
- a) Time and date of maintenance / testing
- b) Name, title, and signature of the person performing the maintenance / testing
- c) A detailed description of the maintenance / testing
- d) Any corrective action taken as result of the maintenance / testing
- 3. The owner or operator of the facility shall keep records which clearly verify compliance with the emission restrictions of this plan approval.
- 4. The owner or operator shall maintain comprehensive accurate records of the number of hours per month that each engine operated, the amount of each fuel type that is used per month in each engine, records to demonstrate that all





performance testing and periodic monitoring requirements are fulfilled, the date construction began, the date of initial startup, and the date testing was performed for each engine.

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

# 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1. The engine shall be operated and maintained as prescribed by the manufacturer. A copy of the engine's operational and maintenance literature shall be readily available and provided to the Department upon request.
- 2. The oxidation catalyst shall be operated and maintained as prescribed by the manufacturer. A copy of the catalyst's operational and maintenance literature shall be readily available and provided to the Department upon request. A copy of the catalyst's warranty/guarantee literature shall be readily available and provided to the Department upon request.

## VII. ADDITIONAL REQUIREMENTS.

# 005 [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?

[Subpart JJJJ added and reserved at 71 FR 38497, July 6, 2006; text added at 73 FR 3591, Jan. 18, 2008; amended at 76 FR 37972, June 28, 2011]

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) (3) [Does not apply]
- (4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (ii) (iv) [Does not apply]
- (5) (6) [Does not apply]
- (b) (d) [Does not apply]
- (e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
- (f) [Does not apply]



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

- (a) (d) [Does not apply]
- (e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.
- (f) (g) [Does not apply]
- (h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

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

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

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

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) [Does not apply]
- (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
- (1) [Does not apply]
- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
- (i) [Does not apply]
- (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
- (c) (d) [Does not apply]
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a



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

(f) -(i) [Does not apply]

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

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

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

- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

ER = [Refer to §60.4244 for formula and exact notation] (Eq.1)

#### Where:

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

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

1.912 x 10-3 = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

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

ER = [Refer to §60.4244 for formula and exact notation] (Eq.2)

Where:

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





Cd = Measured CO concentration in ppmv.

1.164 x 10-3 = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

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

ER = [Refer to §60.4244 for formula and exact notation] (Eq.3)

#### Where:

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

Cd = VOC concentration measured as propane in ppmv.

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

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

T = Time of test run, in hours.

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

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

RFi = [Refer to §60.4244 for formula and exact notation] (Eq.4)

## Where:

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

CMi = Measured concentration of compound i in ppmv as carbon.

CAi = True concentration of compound i in ppmv as carbon.

C icorr = [Refer to §60.4244 for formula and exact notation] (Eq.5)

#### Where:

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

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





CPeq = [Refer to §60.4244 for formula and exact notation] (Eq.6)

Where:

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

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

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

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) [Does not apply]
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
- (b) [Does not apply]
- (c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.
- (d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
- (e) [Does not apply]

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016]



# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

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





Group Name: COMPRESSOR ENGINES 101 & 102

Group Description: Two (2) Caterpillar model G3606LE engines, each rated 1,775 bhp at 1000 rpm

Sources included in this group

	ID	D Name	
101 CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT		CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT	
	102	CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT	

#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

1) [25 Pa. Code Section 127.12(b)]

Emissions of air contaminates from each natural gas compressor engine into the atmosphere shall not exceed the following:

- a) NOx: 0.50 g/bhp-hr, 1.96 lbs./hr, 8.57 tpy\*
- b) CO: 0.77 g/bhp-hr, 3.01 lbs./hr, 13.20 tpy\*
- c) VOC\*\*: 0.25 g/bhp-hr, 0.98 lbs./hr, 4.28 tpy\*
- d) HCHO: 0.05 g/bhp-hr, 0.20 lbs./hr, 0.86 tpy\*

\*as calculated from a twelve month rolling total

#### II. TESTING REQUIREMENTS.

#### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1) Within 60 days after achieving the maximum production rate at which the engine will be operated but no later than 180 days after startup, stack tests for NOx, CO, HCHO, and VOC (NMNEHC) shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection. The stack tests shall be performed on each engine while the aforementioned source is operating within 10 percent of 100 percent peak (or the highest achievable) load as stated in the application. The Department shall be furnished the results of the test in a written report.
- 2) At least thirty (30) calendar days prior to commencing an emission testing program to demonstrate compliance required by Plan Approval 43-366B, a Test Protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office for review and approval. The Test Protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- 3) At least fifteen (15) calendar days prior to commencing an emission testing program to demonstrate compliance required by Plan Approval 43-366B, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Notification, in writing, shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing
- and Monitoring, so that an observer may be present. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing.
- 4) Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program to demonstrate compliance required by Plan Approval 43-366B, if a complete test report has not yet been submitted, an electronic notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.

<sup>\*\*</sup> As defined by 40 CFR 51.100(s) excluding HCHO



- 5) A complete test report shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program required by Plan Approval 43-366B.
- 6) The complete test report shall include a summary of the emission results at the beginning of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (a) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - (b) Permit number(s) and condition(s) which are the basis for the evaluation.
  - (c) Summary of results with respect to each applicable permit condition.
  - (d) Statement of compliance or non-compliance with each applicable permit condition.
- 7) All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- 8) All testing with the exception of periodic monitoring shall be performed in accordance with any applicable federal regulations (such as New Source Performance Standards), 25 Pa. Code, Chapter 139, and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The owner or operator of the facility shall use the following federal reference methods or alternative test methods approved, in writing, by the Department to demonstrate compliance:
- 40 CFR Part 60, Appendix A, Method 7E or 40 CFR Part 63, Appendix A, Method 320 shall be used to determine the nitrogen oxide (NOx) emissions.
- 40 CFR Part 60, Appendix A, Method 10 or 40 CFR Part 63, Appendix A, Method 320 shall be used to determine the carbon monoxide (CO) emissions.
- 40 CFR Part 60 Methods 25A and 18 or 40 CFR Part 60 Method 25A and 40 CFR Part 63 Method 320 shall be used to determine the NonMethane Non- Ethane Hydrocarbon (NMNEHC) emissions.
- 40 CFR Part 63 Appendix A, Method 320 or Method 328 shall be used to determine the Formaldehyde (HCHO) emissions.
- 9) Reports, protocols and test completion notification with the exception of periodic monitoring data shall be submitted through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal is not feasible, copies of the submittal shall be sent to the appropriate Pennsylvania Department of Environmental Protection Regional Office (Air Quality Program, 230 Chestnut Street, Meadville, PA 16335) and to the attention of the Department's Bureau of Air Quality, Division of Source Testing and Monitoring (400 Market Street, 12th Floor Rachel Carson State Office Building, Harrisburg, PA 17105-8468), with deadlines verified through document postmarks.
- 10) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the owner or operator shall comply with the most stringent provision, term, condition, method or rule.
- 11) Actions Related to Noncompliance Demonstrated by a Stack Test:
- (a) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permittee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.





(b) If the results of the required stack test exceed any limit defined in Plan Approval 43-366B, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the plan approval, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the plan approval, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the plan approval may be grounds for immediate revocation of the plan approval to operate the affected source.

12) In addition to the source testing required by Conditions 1-11 of this Section, semi-annually (but no sooner than sixty (60) days from the previous test and no later than 3 years from the previous test), the owner or operator shall perform periodic monitoring for NOx and CO emissions to verify continued compliance upon each of the respective engines. A Department-approved test that has been performed within 60 days prior to the scheduled periodic monitoring may be used in lieu of the periodic monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three test runs of twenty (20) minutes for each test run. The Department may alter the frequency of portable analyzer tests based on the test results. The frequency of portable gas analyzer tests may be altered with written Departmental approval. The portable gas analyzer shall be used and maintained according to the manufacturer's specifications and the procedures specified in ASTMD 6522 or equivalent as approved by the Department.

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

## # 003 [25 Pa. Code §127.12b]

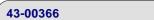
Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1. All maintenance and testing performed on the oxidation catalyst shall be recorded in a log. This record shall, at a minimum, include:
- a) Time and date of maintenance / testing
- b) Name, title, and signature of the person performing the maintenance / testing
- c) A detailed description of the maintenance / testing
- d) Any corrective action taken as result of the maintenance / testing
- 2. All maintenance and testing performed on the engine shall be recorded in a log. This record shall, at a minimum, include:
- a) Time and date of maintenance / testing
- b) Name, title, and signature of the person performing the maintenance / testing
- c) A detailed description of the maintenance / testing
- d) Any corrective action taken as result of the maintenance / testing
- 3. The owner or operator of the facility shall keep records which clearly verify compliance with the emission restrictions of this plan approval.
- 4. The owner or operator shall maintain comprehensive accurate records of the number of hours per month that each engine operated, the amount of each fuel type that is used per month in each engine, records to demonstrate that all performance testing and periodic monitoring requirements are fulfilled, the date construction began, the date of initial startup, and the date testing was performed for each engine.

#### V. REPORTING REQUIREMENTS.

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





#### VI. WORK PRACTICE REQUIREMENTS.

# 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[from Plan Approval 43-366B]

- 1. The engine shall be operated and maintained as prescribed by the manufacturer. A copy of the engine's operational and maintenance literature shall be readily available and provided to the Department upon request.
- 2. The oxidation catalyst shall be operated and maintained as prescribed by the manufacturer. A copy of the catalyst's operational and maintenance literature shall be readily available and provided to the Department upon request. A copy of the catalyst's warranty/guarantee literature shall be readily available and provided to the Department upon request.

#### VII. ADDITIONAL REQUIREMENTS.

# 005 [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?

[Subpart JJJJ added and reserved at 71 FR 38497, July 6, 2006; text added at 73 FR 3591, Jan. 18, 2008; amended at 76 FR 37972, June 28, 2011]

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) (3) [Does not apply]
- (4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (ii) (iv) [Does not apply]
- (5) (6) [Does not apply]
- (b) (d) [Does not apply]
- (e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
- (f) [Does not apply]

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

- (a) (d) [Does not apply]
- (e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines,



if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

- (f) (g) [Does not apply]
- (h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

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

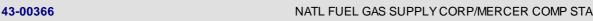
# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion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

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

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

- (a) [Does not apply]
- (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
- (1) [Does not apply]
- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
- (i) [Does not apply]
- (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
- (c) (d) [Does not apply]
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.
- (f) (i) [Does not apply]

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





# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

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

- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1
- (d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

ER = [Refer to §60.4244 for formula and exact notation] (Eq.1)

#### Where:

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

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

1.912 x 10-3 = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.

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

T = Time of test run, in hours.

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

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

ER = [Refer to §60.4244 for formula and exact notation] (Eq.2)

## Where:

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

Cd = Measured CO concentration in ppmv.

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

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

T = Time of test run, in hours.

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

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included.





To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

ER = [Refer to §60.4244 for formula and exact notation] (Eq.3)

Where:

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

Cd = VOC concentration measured as propane in ppmv.

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

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

T = Time of test run, in hours.

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

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

RFi = [Refer to §60.4244 for formula and exact notation] (Eq.4)

Where:

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

CMi = Measured concentration of compound i in ppmv as carbon.

CAi = True concentration of compound i in ppmv as carbon.

C icorr = [Refer to §60.4244 for formula and exact notation] (Eq.5)

Where:

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

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

CPeg = [Refer to §60.4244 for formula and exact notation] (Eg.6)

Where:

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

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?





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

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) [Does not apply]
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
- (b) [Does not apply]
- (c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.
- (d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.
- (e) [Does not apply]

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013; 81 FR 59809, Aug. 30, 2016]

# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

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



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

No Alternative Operations exist for this permit.





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

# Source Id Source Descriptior 101 CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT

101	OATEN BEAR GOWN REGGER ENGINE, GOODEE 1,770 BHI, WOROA		
<b>Emission Limit</b>			Pollutant
0.770	GRAMS/HP-Hr		CO
3.010	Lbs/Hr		CO
13.200	Tons/Yr	as calculated from a twelve month rolling total	CO
0.050	GRAMS/HP-Hr		Formaldehyde
0.200	Lbs/Hr		Formaldehyde
0.860	Tons/Yr	as calculated from a twelve month rolling total	Formaldehyde
0.500	GRAMS/HP-Hr		NOX
1.960	Lbs/Hr		NOX
8.570	Tons/Yr	as calculated from a twelve month rolling total	NOX
0.250	GRAMS/HP-Hr	As defined by 40 CFR 51.100(s) excluding HCHO	VOC
0.980	Lbs/Hr	As defined by 40 CFR 51.100(s) excluding HCHO	VOC
4.280	Tons/Yr	As defined by 40 CFR 51.100(s) excluding HCHO / as calculated from a twelve month rolling total	VOC

# 102 CATERPILLAR COMPRESSOR ENGINE, G3606LE 1,775 BHP, W/ OX CAT

<b>Emission Limit</b>			Pollutant
0.770	GRAMS/HP-Hr		CO
3.010	Lbs/Hr		CO
13.200	Tons/Yr	as calculated from a twelve month rolling total	СО
0.050	GRAMS/HP-Hr		Formaldehyde
0.200	Lbs/Hr		Formaldehyde
0.860	Tons/Yr	as calculated from a twelve month rolling total	Formaldehyde
0.500	GRAMS/HP-Hr		NOX
1.960	Lbs/Hr		NOX
8.570	Tons/Yr	as calculated from a twelve month rolling total	NOX
0.250	GRAMS/HP-Hr	As defined by 40 CFR 51.100(s) excluding HCHO	VOC
0.980	Lbs/Hr	As defined by 40 CFR 51.100(s) excluding HCHO	VOC
4.280	Tons/Yr	As defined by 40 CFR 51.100(s) excluding HCHO / as calculated from a twelve month rolling total	VOC

## 103 CATERPILLAR EMERGENCY GEN, 3516LE, 1,053 BHP, W/ NSCR, AFRC

<b>Emission Limit</b>			Pollutant
0.300	GRAMS/HP-Hr		CO
0.012	GRAMS/HP-Hr		Formaldehyde
0.200	GRAMS/HP-Hr		NOX
0.200	GRAMS/HP-Hr	* As defined by 40 CFR 51.100(s) excluding HCHO	VOC







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

106 CATERPILLAR COMP. ENGINE, G3612 3,750 BHP, W/ OX CAT, AFRC

<b>Emission Limit</b>			Pollutant
0.330	GRAMS/HP-Hr		CO
2.730	Lbs/Hr		CO
11.950	Tons/Yr		CO
0.050	GRAMS/HP-Hr		Formaldehyde
0.410	Lbs/Hr		Formaldehyde
1.810	Tons/Yr		Formaldehyde
0.500	GRAMS/HP-Hr		NOX
4.130	Lbs/Hr		NOX
18.110	Tons/Yr		NOX
0.250	GRAMS/HP-Hr	As defined in NSPS Subpart JJJJ and not including HCHO	VOC
2.070	Lbs/Hr	As defined in NSPS Subpart JJJJ and not including HCHO	VOC
9.050	Tons/Yr	As defined in NSPS Subpart JJJJ and not including HCHO	VOC

## **Site Emission Restriction Summary**

Emission Limit	Pollutant
EIIIISSIOII LIIIIII	Foliulatii

DEP Auth ID: 1314664



#### SECTION H. Miscellaneous.

43-00366

- (a) The Capacity/Hour numbers listed on Page 4 and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable emission limits are listed in the Restriction section for each source. They are also summarized for informational purposes only in Section F.
- (b) There are no applicable emission limitations, testing, monitoring, recordkeeping, or reporting requirements for the following sources:
  - One (1) 3,000-gallon lube oil tank
  - One (1) 1,000-gallon glycol tank
  - One (1) natural gas-fired emergency generator rated at 9 bhp with 0.16-mmbtu/hr heat input
  - One (1) natural gas-fired pipeline heater with 3.85-mmbtu/hr heat input
  - One (1) odorant flare with 1.00-mmbtu/hr heat input
- (c) Mr. Jeffery J. Kittka, Vice President of National Fuel Gas Supply Corporation, 1100 State Street, Erie, PA 16501, is designated as the alternate Responsible Official. His contact information is as follows: phone number 814-871-8625; e-mail address KittkaJ@natfuel.com.
- (d) This permit was administratively amended on August 5, 2020 to change the responsible official.





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