



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

# STATE ONLY OPERATING PERMIT

Issue Date: July 9, 2019 Effective Date: July 9, 2019

Expiration Date: June 30, 2024

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: 43-00356

Federal Tax Id - Plant Code: 25-1662167-1

	Owner information
Name: HERMITAGE MUNI AUTH MER	CER CNTY
Mailing Address: 800 N HERMITAGE RD HERMITAGE, PA 16148-3220	
1121111111102,1111111100220	
	Plant Information
Plant: HERMITAGE MUNI AUTH/HERMITAGE V	NPCP
Location: 43 Mercer County	43918 Hermitage City
SIC Code: 4952 Trans. & Utilities - Sewerage Syst	ems
	Responsible Official
Name: THOMAS DARBY	
Title: MGR	
Phone: (724) 347 - 4941	
	Permit Contact Person
Name: THOMAS DARBY	
Title: MGR	
Phone: (724) 347 - 4941	
[Signature]	
ERIC A. GUSTAFSON, NORTHWEST REGION AIR	PROGRAM MANAGER





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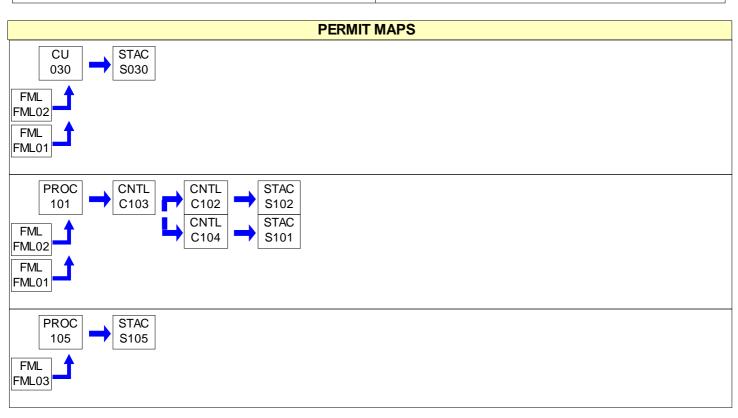
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# SECTION A. Site Inventory List

BOILER (150 HP)  HEAT & POWER UNIT (CHP) (7.146	6.277 9.808 6.277	MMBTU/HR MCF/HR MCF/HR	BIOGAS
HEAT & POWER UNIT (CHP) (7.146			
HEAT & POWER UNIT (CHP) (7.146	6.277	MCF/HR	
HEAT & POWER UNIT (CHP) (7.146			Natural Gas
` , , ,	NIT (CHP) (7.146 7.146	MMBTU/HR	
	7.146	MMBTU/HR	BIOGAS
	7.146	MCF/HR	Natural Gas
CY GENERATOR (1474 HP)	24.603	MMBTU/HR	
	177.000	Gal/HR	Diesel Fuel
CY FLARE (11,600 SCFH)			
BSORPTION MEDIA SCRUBBER			
YTIC OXIDIZER			
AS SUPPLY			
PPLY			
ıK			
ACK			
OXIDIZER STACK			
CK			
CY GENERATOR STACK			
	EY GENERATOR (1474 HP)  EY FLARE (11,600 SCFH)  BSORPTION MEDIA SCRUBBER  YTIC OXIDIZER  AS SUPPLY  PPLY  IK  ACK  OXIDIZER STACK  CK	7.146 7.146 7.146 7.146 24.603 177.000 EY FLARE (11,600 SCFH) BSORPTION MEDIA SCRUBBER SYTIC OXIDIZER AS SUPPLY PPLY IIK ACK OXIDIZER STACK CK	7.146 MMBTU/HR 7.146 MCF/HR 24.603 MMBTU/HR 177.000 Gal/HR  EY FLARE (11,600 SCFH) BSORPTION MEDIA SCRUBBER YTIC OXIDIZER AS SUPPLY PPLY IIK ACK OXIDIZER STACK CK









#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

#### #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.







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

#### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §121.7]

#### Prohibition of air pollution.

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

## # 002 [25 Pa. Code §123.1]

# Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:
  - (1) Construction or demolition of buildings or structures.
  - (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations.
- (7) (8) [Do not apply]
- (9) Sources and classes of sources other than those identified in paragraphs (1)—(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) The emissions are of minor significance with respect to causing air pollution.
- (ii) The emissions are not preventing or interfering with the attainment or maintenance of an ambient air quality standard.
- (b) An application form for requesting a determination under either subsection (a)(9) or § 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, charac-teristics of emissions, quantity of emissions and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant is required to demonstrate that the requirements of subsections (a)(9) and (c) and § 123.2 [Condition #003, below] (relating to fugitive particulate matter) or of the requirements of § 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.
- (c) [Printed under Work Practice Requirements in this section of permit.]
- (d) [Does not apply]

## # 003 [25 Pa. Code §123.2]

#### **Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in § 123.1(a)(1)—(9) [Condition #002, above] (relating to prohibition of certain fugitive emissions) if the emissions are visible at the point the emissions pass outside the person's property.

## # 004 [25 Pa. Code §123.31]

#### Limitations

(a) [Printed under Work Practice Requirements in this section of permit.]





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

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

(c) [Does not apply]

#### # 005 [25 Pa. Code §123.41]

#### Limitations

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

- (1) Equal to or greater than 20% for a period or periods aggregating more than 3 minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

#### # 006 [25 Pa. Code §123.42]

#### **Exceptions**

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

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in § 123.1 (a)(1)—(9) [Condition #002, above] (relating to prohibition of certain fugitive emissions).
- (4) [Does not apply]

#### TESTING REQUIREMENTS.

#### # 007 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

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

[From Plan Approval 43-356A]

#### MONITORING REQUIREMENTS. III.

#### # 008 [25 Pa. Code §123.43]

## Measuring techniques

Visible emissions may be measured using either of the following:

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

## RECORDKEEPING REQUIREMENTS.

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







# SECTION C. Site Level 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.

#### # 009 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

[From 25 Pa. Code § 123.1(c):]

- (c) A person responsible for any source specified in subsections (a)(1)—(7) or (9) [Condition #002, above] shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions 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.

# # 010 [25 Pa. Code §123.31]

#### Limitations

From 25 Pa. Code § 123.31(a):]

- (a) Limitations are as follows:
- (1) If control of malodorous air contaminants is required under subsection (b) [Condition #004, above], emissions shall be incinerated at a minimum of 1200°F for at least 0.3 second prior to their emission into the outdoor atmosphere.
- (2) Techniques other than incineration may be used to control malodorous air contaminants if such techniques are equivalent to or better than the required incineration in terms of control of the odor emissions and are approved in writing by the Department.

## VII. ADDITIONAL REQUIREMENTS.

## # 011 [25 Pa. Code §129.14]

## Open burning operations

- (a) [Does not apply]
- (b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
  - (3) The emissions interfere with the reasonable enjoyment of life or property.
  - (4) The emissions cause damage to vegetation or property.



SECTION C.



# **Site Level Requirements**



- (c) Exceptions. The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
  - (2) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
  - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
  - (4) (5) [Do not apply]
  - (6) A fire set solely for recreational or ceremonial purposes.
  - (7) A fire set solely for cooking food.
- (d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
  - (1) As used in this subsection the following terms shall have the following meanings:

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

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

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

#### 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.

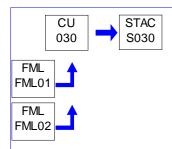




Source ID: 030 Source Name: START UP BOILER (150 HP)

Source Capacity/Throughput: 6.277 MMBTU/HR

9.808 MCF/HR BIOGAS6.277 MCF/HR Natural Gas



#### I. RESTRICTIONS.

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

# # 001 [25 Pa. Code §123.11]

#### **Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from this combustion unit in excess of the rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

## # 002 [25 Pa. Code §123.22]

#### **Combustion units**

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

# Fuel Restriction(s).

## # 003 [25 Pa. Code §127.12b]

# Plan approval terms and conditions.

This source shall be fueled by natural gas or biogas only.

[From Plan Approval 43-356A]

#### 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.

# # 004 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

- a) The owner or operator of each affected facility shall record and maintain records of operating hours and the amounts of each fuel combusted during each day for source 030.
- b) All records shall be maintained for at least five (5) years.

[From Plan Approval 43-356A]







## 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.

# 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) Natural gas and biogas fuel use will be metered.
- b) This source will be operated in a manner consistent with good air pollution practices.
- c) This source will be maintained according to manufacturer's specifications.

[From Plan Approval 43-356A]

# VII. ADDITIONAL REQUIREMENTS.

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



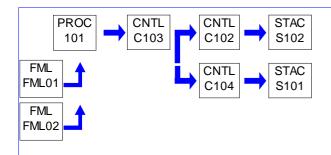




Source ID: 101 Source Name: COMBINED HEAT & POWER UNIT (CHP) (7.146 MMBTU/HR)

> Source Capacity/Throughput: 7.146 MMBTU/HR

> > **BIOGAS** 7.146 MMBTU/HR 7.146 MCF/HR Natural Gas



This source occurs in alternate operation BIO GAS LESS THAN 10 % OF HEAT INPUT

#### RESTRICTIONS.

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

#### # 001 [25 Pa. Code §123.13]

#### **Processes**

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

#### # 002 [25 Pa. Code §123.21]

#### General

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

#### # 003 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

The following emission limits apply to Source 101:

- a) NOx: 2.0 grams per horsepower hour
- b) CO: 0.35 grams per horsepower hour
- c) VOC: 0.07 grams per horsepower hour

[These limits are from Plan Approval Application 43-356C, Attachment C - Emission Calculations, Page 1, Biogas Table.]

#### # 004 [25 Pa. Code §127.12b]

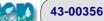
#### Plan approval terms and conditions.

- (a) The flare shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any two consecutive hours. The opacity of the emissions shall not be equal to or greater than 10% at any time.
- (b) The particulate matter (PM) emissions for the flare shall not exceed 0.02 grain/dscf

## [From Plan Approval 43-356A]

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

[The NOx, CO, and VOC limits from Table 1 have been streamlined out and replaced with stricter limits in Condition #003]

- (f) (g) [Do 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]

#### II. TESTING REQUIREMENTS.

# 006 [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) (i) [Do not apply]

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

# 007 [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.

[From Table 2 to Subpart JJJJ of Part 60 - Requirements for Performance Tests]





- 1. For each stationary SI internal combustion engine demonstrating compliance according to §60.4244 complying with the requirement to:
- a. limit the concentration of NOX in the stationary SI internal combustion engine exhaust, you must:
- i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;
  - ii. Determine the O2 concentration of the stationary internal combustion engine exhaust at the sampling port location;
  - iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;
- iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and
- v. Measure NOX at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device

#### Using:

- (1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate
- (2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[a][d]
- (3) Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7
- (4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[d][e]
- (5) Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005)[a][d], Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[d][e]

#### According to the following requirements:

- (a) Alternatively, for NOX, O2, and moisture measurement, ducts =6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and =12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
- (b) Measurements to determine O2 concentration must be made at the same time as the measurements for NOX concentration.
  - (c) Measurements to determine moisture must be made at the same time as the measurement for NOX concentration.
  - (d) Results of this test consist of the average of the three 1-hour or longer runs.
- b. limit the concentration of CO in the stationary SI internal combustion engine exhaust, you must:
- i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;
  - ii. Determine the O2 concentration of the stationary internal combustion engine exhaust at the sampling port location;
  - iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;



- iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and
- v. Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device

#### Using:

- (1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate
- (2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[a][d]
- (3) Method 2 or 2C of 40 CFR 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7
- (4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[d][e]
- (5) Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005)[a][d][e], Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[d][e]

According to the following requirements:

- (a) Alternatively, for CO, O2, and moisture measurement, ducts =6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and =12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
- (b) Measurements to determine O2 concentration must be made at the same time as the measurements for CO concentration.
  - (c) Measurements to determine moisture must be made at the same time as the measurement for CO concentration.
  - (d) Results of this test consist of the average of the three 1-hour or longer runs.
- c. limit the concentration of VOC in the stationary SI internal combustion engine exhaust, you must:
- i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine;
  - ii. Determine the O2 concentration of the stationary internal combustion engine exhaust at the sampling port location;
  - iii. If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust;
- iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and
- v. Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device

## Using:

- (1) Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate
- (2) Method 3, 3A, or 3B[b] of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005)[a][d]





- (3) Method 2 or 2C of 40 CFR 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7
- (4) Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[d][e]
- (5) Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a hydrocarbon cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6[c][e], Method 320 of 40 CFR part 63, appendix A[e], or ASTM Method D6348-03[d][e]

According to the following requirements:

- (a) Alternatively, for VOC, O2, and moisture measurement, ducts =6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and =12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, Appendix A.
- (b) Measurements to determine O2 concentration must be made at the same time as the measurements for VOC concentration.
  - (c) Measurements to determine moisture must be made at the same time as the measurement for VOC concentration.
  - (d) Results of this test consist of the average of the three 1-hour or longer runs.

#### Notes:

- [a] Also, you may petition the Administrator for approval to use alternative methods for portable analyzer.
- [b] You may use ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses, for measuring the O2 content of the exhaust gas as an alternative to EPA Method 3B. AMSE PTC 19.10-1981 incorporated by reference, see 40 CFR 60.17
- [c] You may use EPA Method 18 of 40 CFR part 60, appendix A-6, provided that you conduct an adequate pre-survey test prior to the emissions test, such as the one described in OTM 11 on EPA's Web site (http://www.epa.gov/ttn/emc/prelim/otm11.pdf).
- [d] Incorporated by reference; see 40 CFR 60.17.
- [e] You must meet the requirements in §60.4245(d).

[81 FR 59809, Aug. 30, 2016]

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

ER = (Cd \* 1.912 \* (10\*\*-3) \* Q \* T) / HP-hr (Equation 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.



# **43-00356**



# **SECTION D.** Source Level Requirements

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

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

ER = (Cd \* 1.164 \* (10\*\*-3) \* Q \* T) / HP-hr (Equation 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 = (Cd \* 1.833 \* (10\*\*-3) \* Q \* T) / HP-hr (Equation 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 = CMi / CAi (Equation 4)

Where:

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

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

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

Cicorr = RFi \* Cimeas (Equation 5)

Where:

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

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

Cpeq = 0.6098 \* Cicorr (Equation 6)

Where:

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



## 43-00356

## TIETUMITAGE MOTORAGE TIATIETO MITAGE WITGE



#### III. MONITORING REQUIREMENTS.

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

- Plan approval terms and conditions.
- a) Control device monitoring gauges shall be installed. Gauges shall be installed in accessible locations, and shall be maintained in workable, readable condition at all times.
- b) The volume of biogas used by source 101 will be monitored through the use of a flow meter, or other Department approved method.
- c) The volume of natural gas used by source 101 will be monitored through the use of a flow meter, or other Department approved method.

[From Plan Approval 43-356C]

#### IV. RECORDKEEPING REQUIREMENTS.

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

- a) The permittee shall maintain a record of all preventative maintenance inspections of the control devices. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.
- b) [Removed]
- c) The permittee shall maintain records of the following from the weekly operational inspections from the engine catalytic oxidizer:
- 1. Pressure drop
- 2. Inlet and outlet temperatures
- 3. Engine operating hours
- d) Daily records will be kept of the volume of biogas and natural gas combusted in source 101. Daily totals will be used to calculate monthly totals. The totals from the previous eleven (11) months will be combined to form a twelve (12) rolling total.
- e) On a monthly basis, the gross heat input using biogas will be calculated using the twelve (12) month rolling totals for natural gas and biogas use for source 101.
- f) The permittee shall keep all records for a period of five (5) years and make the records available to the Department upon request.

[From Plan Approval 43-356C]

# 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]

43-00356

(c) - (e) [Printed under Reporting Requirements in this section of permit.]

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

#### V. REPORTING REQUIREMENTS.

#### # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within 60 days of the startup of this equipment, the permittee will supply an operating range for the following:

- a) [Removed]
- b) [Removed]
- c) The engine catalytic oxidizer pressure drop.
- d) The engine catalytic oxidizer inlet and outlet temperatures.

The values supplied will be incorporated into the operating permit in condition #014.

#### [From Plan Approval 43-356B]

# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

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

- (a) (b) [Printed under Recordkeeping Requirements in this section of permit.]
- (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]

#### VI. WORK PRACTICE REQUIREMENTS.

# # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) If the calculated rolling twelve (12) month bio gas heat input is less than 10 percent, the permittee will be subject to the emission limits and testing requirements outlined in the alternative operating scenario. Source 101 will remain subject to all other conditions outlined in Section D.
- b) The permittee shall perform a daily operational inspection of the control devices.
- c) [Removed]
- d) [Removed]
- e) The permittee shall maintain a manometer or similar device to measure pressure drop across the engine catalytic oxidizer.
- f) The permittee shall maintain a thermocouple or similar device to measure inlet and outlet temperatures across the engine catalytic oxidizer.
- g) The permittee shall operate the control devices at all times that the source is in operation.
- h) The permittee shall maintain and operate the source and control devices in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[From Plan Approval 43-356C]

#### # 014 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

The permittee shall adhere to the approved range for the selected indicator so that operation within the range shall provide reasonable assurance of compliance.

- 1) [Removed]
- 2) [Removed]
- 3) The pressure drop across the engine catalytic oxidizer.

3.5 in to 6.5 in W.C.

4) The engine catalytic oxidizer inlet temperature.

300°F or greater

5) The engine catalytic oxidizer outlet temperature.

300°F or greater

[From Plan Approval 43-356C]





#### # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) The flare shall be equipped with a continuous pilot ignition source using an auxiliary fuel.
- b) The flare shall be operated with a flame present at all times, when the biogas pressure switch is open. The flare shall be equipped with an automatic shut-off mechanism designed to immediately stop the flow of gases when a flameout occurs. During restart or start-up, there shall be sufficient flow of auxiliary fuel to the burners such that unburnt biogas gases are not emitted to the atmosphere.

[From Plan Approval 43-356A]

# 016 [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.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 017 [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?

- (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) [Do 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) [Does not apply]
- (ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
  - (iii) (iv) [Do not apply]
  - (5) Owners and operators of stationary SI ICE that commence modification or reconstruction after June 12, 2006.
- (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) [Does not apply]
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
- (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]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

- # 018 [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) [Does not apply]
- (b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

## (c) - (e) [Do not apply]

# 019 [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.

[Refer to Table 3 of Subpart JJJJ for General Provisions.]

# 020 [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?

[Refer to 40 CFR §60.4248 for definitions applicable to Subpart JJJJ.]

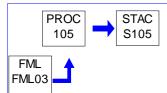




Source ID: 105 Source Name: EMERGENCY GENERATOR (1474 HP)

Source Capacity/Throughput: 24.603 MMBTU/HR

177.000 Gal/HR Diesel Fuel



#### I. RESTRICTIONS.

# **Emission Restriction(s).**

## # 001 [25 Pa. Code §123.13]

#### **Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

# # 002 [25 Pa. Code §123.21]

#### **General**

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

## # 003 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

The following emission limits apply to Source 105:

- a) NOx: 6.9 grams per horsepower hour
- b) CO: 2.0 grams per brakehorsepower hour
- c) VOC: 1.0 grams per brakehorsepower hour
- d) PM: 0.4 grams per brakehorsepower hour

(These limits are from GP-9, which is considered BAT for this source.)

## [From Plan Approval 43-356B]

# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

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

[The following emission limits are from Part 60 Subpart IIII Table 1 and are applicable to Source 105. These limits are applicable because Source 105 is a 2010 model year, rated at 1,474 hp with a displacement less than 10 liters per cylinder:] [The NOx, CO, and HC limits from Table 1 have been streamlined out and replaced with those considered BAT from GP-9 in Condition #003]

- (c) (d) [Do not apply]
- (e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.





(f) [Does not apply]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

#### Fuel Restriction(s).

#### # 005 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

The average sulfur content of the diesel fuel shall not exceed 0.0015% by weight based on a consecutive 12-month period. [This limit comes from 40 CFR §80.510(b), which took effect on June 1, 2010.]

## [From Plan Approval 43-356A]

# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

The limit from 40 CFR 80.510(a) for sulfur content is 500 parts per million (ppm) maximum per gallon.

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

The limit from 40 CFR 80.510(b) for sulfur content is 15 ppm maximum for NR diesel fuel.

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

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

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

## # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The hours of operation of Source 105 shall not exceed 100 hours in a 12-month rolling period.

#### [From Plan Approval 43-356A]

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?
[From 40 CFR §60.4211(f):]

- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(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.





# M Source

# **SECTION D.** Source Level Requirements

- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(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 (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
  - (ii) (iii) [Paragraphs 60.4211(f)(2)(ii)-(iii) were vacated by the U.S. Court of Appeals on May 1, 2015.]
- (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 (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
  - (i) [Does not apply]
  - (ii) [Reserved]

#### II. TESTING REQUIREMENTS.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4212]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE requirement for each pollutant = (1.25) \* (STD) (Equation 1)

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CIICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) [Does not apply]







(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

## III. MONITORING REQUIREMENTS.

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary Cl internal combustion engine?

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

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

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

#### IV. RECORDKEEPING REQUIREMENTS.

# # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) The permittee shall maintain monthly records of the following.
- 1. Times the source is operated (hours, date and duration of each time the engine is operated).
- 2. Reason the source was operated.
- 3. Diesel fuel consumption
- 4. Average sulfur content of the diesel fuel
- b) The facility shall keep a record of the date of the electrical interruption, the cause of the electrical interruption and the duration of the electrical interruption.
- c) The permittee shall, at a minimum, obtain one of the following:
- 1. A fuel analysis of the btu value and sulfur content (% by weight), conducted on each shipment received as prescribed in 25 PA Code Chapter 139.
- 2. Written certification from the fuel supplier, signed by a responsible official, which certifies the aforesaid fuel characteristics for each shipment delivered to the facility.

# [From Plan Approval 43-356A]

# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary Cl internal combustion engine?

- (a) [Does not apply]
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason





the engine was in operation during that time.

- (c) (d) [Do not apply]
- (e) Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

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

- a) The permittee shall maintain and operate the source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices. A copy of the manufacturers preventative maintenance specifications shall be maintained on site and provided to the Department as requested.
- b) Source 105 shall only be used during electrical failures or to perform preventative maintenance. The emergency generator shall not be used to supplement the primary power supply to the facility.

[From Plan Approval 43-356A]

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

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

[76 FR 37969, June 28, 2011]

- [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?
- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:
- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions:
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- (b) (e) [Do not apply]
- (f) [Printed under Restrictions in this section of the permit.]
- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:





- (1) (2) [Do not apply]
- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emissionrelated settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.
- (h) The requirements for operators and prohibited acts specified in 40 CFR 1039.665 apply to owners or operators of stationary CI ICE equipped with AECDs for qualified emergency situations as allowed by 40 CFR 1039.665.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013; 81 FR 44219, July 7, 2016]

#### VII. ADDITIONAL REQUIREMENTS.

# [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
  - (1) [Does not apply]
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:
  - (i) Manufactured after April 1, 2006 and are not fire pump engines
  - (ii) [Does not apply]
- (3) (4) [Do not apply]
- (b) [Does not apply]
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.
- (d) Stationary CI 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 part 89, subpart J and 40 CFR part 94, subpart J, 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.
- (e) [Does not apply]

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

# 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]

43-00356



# **SECTION D.** Source Level Requirements

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

[Refer to Table 8 of Subpart IIII for General Provisions.]

# 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4219] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What definitions apply to this subpart?

[Refer to 40 CFR §60.4219 for definitions applicable to Subpart IIII.]







Alternative Operation Name: BIO GAS LESS THAN 10 % OF HEAT INPUT

#### #001 CHANGES FROM NORMAL OPERATION

Should monthly gross heat input calculations performed using data from the twelve (12) month rolling total for bio gas and natural gas show that bio gas use is less than 10 percent of the gross heat input, the requirements of this Alternate Operating Scenario are in effect.

#### Sources included in this Alternative Operation:

ID	Name	Source Type
101	COMBINED HEAT & POWER UNIT (CHP) (7.146 MMBTU/HR)	Process

#### I. RESTRICTIONS.

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

# # 001 [25 Pa. Code §123.13]

#### **Processes**

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

#### # 002 [25 Pa. Code §123.21]

#### **General**

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

## # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following emission limits apply to Source 101 operating within the alternative operating scenario:

- a) NOx: 1.0 grams per horsepower hour.
- b) CO 0.20 grams per horsepower hour.
- c) VOC 0.10 grams per horsepower hour.

(CO and VOC limits are from page 1 of Attachment C in the plan approval application. The NOx limit is from 40 CFR Part 60 Subpart JJJJ Table 1 for natural gas fueled lean burn SI engines greater than 500 hp manufactured after July 1, 2010.)

## [From Plan Approval 43-356C]

# 004 [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) [Do 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.

[The NOx, CO, and VOC limits from Table 1 have been streamlined out and replaced with stricter limits in Condition #003]

- (f) (g) [Do 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]

#### II. TESTING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 43-356C Alternative Operating Scenario]

When the alternative operating scenario is triggered for the first time, the permittee will be required to perform stack testing using only natural gas as a fuel.

- a) A stack test for NOx, CO and VOC shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection on the Caterpillar, model #G3512 LE engine within 180 days of initial start up under the Alternative Operating Scenario. The stack test shall be performed while the aforementioned source is operating at the maximum or normal rated capacity as stated on the application and combusting natural gas. The stack test shall be conducted at the outlet of the catalytic oxidizer (C104).
- 1. [25 Pa. Code § 139.53(a)(3)] At least 60 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department's Division of Source Testing and Monitoring and two copies to the appropriate Regional Office Department 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.
- 2. [25 Pa. Code § 139.53(a)(3)] At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- 3. [25 Pa. Code § 139.53(a)(3)] Within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail 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.
- 4. [40 CFR Part 60.8(a), 40 CFR Part 61.13(f) and 40 CFR Part 63.7(g)] A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program. For those tests being conducted pursuant to 40 CFR Part 61, a complete test report shall be submitted within 31 days after completion of the test.
- 5. [25 Pa. Code Section 139.53(b)] A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or noncompliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (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.
- 6. [25 Pa. Code § 139.3] All submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.



- 7. All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- 8. [25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3)] All submittals, besides notifications, shall be accomplished through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp when it becomes available. If internet submittal can not be accomplished, one copy of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks. In a like manner, two copies of the submittal shall be sent to the appropriate Regional Office.
- 9. The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.
- 10. 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 Permitee shall take appropriate corrective actions. Within 30 days of the Permitee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permitee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permitee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permitee 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 this plan approval, 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 Permitee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permitee 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.
- # 006 [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) - (i) [Do not apply]

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

# 007 [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?

[Refer to Source 101, Section D, Condition #007, above, for Testing Requirements. This is an identical requirement.]

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

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

#### VII. ADDITIONAL REQUIREMENTS.

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







# **SECTION F.** Emission Restriction Summary.

oource id	Oddice Description
030	START UP BOILER (150 HP)

<b>Emission Limit</b>			Pollutant
4.000	Lbs/MMBTU	of heat input.	SOX
0.400	Lbs/MMBTU	of heat input.	TSP

# 101 COMBINED HEAT & POWER UNIT (CHP) (7.146 MMBTU/HR)

<b>Emission Limit</b>			Pollutant	
0.350	GRAMS/HP-Hr		СО	
2.000	GRAMS/HP-Hr		NOX	
500.000	PPMV	dry basis.	SOX	
0.020	gr/DRY FT3	flare emissions	TSP	
0.040	gr/DRY FT3		TSP	
0.070	GRAMS/HP-Hr		VOC	

# 105 EMERGENCY GENERATOR (1474 HP)

<b>Emission Limit</b>			Pollutant
2.000	GRAMS/HP-Hr		CO
6.900	GRAMS/HP-Hr		NOX
500.000	PPMV	dry basis.	SOX
0.040	gr/DRY FT3		TSP
0.400	GRAMS/HP-Hr		TSP
1.000	GRAMS/HP-Hr		VOC

# **Site Emission Restriction Summary**

Pollutant

# **Alternative Operation Emission Restriction Summary**

Source Id	Source Descri	otion
101 COMBINE		AT & POWER UNIT (CHP) (7.146 MMBTU/HR)
<b>Emission Limit</b>		Pollutant
0.040	gr/DRY FT3	TSP
0.100	GRAMS/HP-Hr	VOC
0.200	GRAMS/HP-Hr	NOX
1.000	GRAMS/HP-Hr	CO
500.000	PPMV dry b	sis. SOX
	,	<del></del>





## **SECTION G.** Miscellaneous.

a) The Capacity/Throughput 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) The initial operating permit incorporating Plan Approval 43-356D was issued on July 9, 2019.





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