

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

### STATE ONLY OPERATING PERMIT

Issue Date: June 29, 2018 Effective Date: July 1, 2018

Expiration Date: June 30, 2023

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: 15-00095

Synthetic Minor

Federal Tax Id - Plant Code: 51-0110625-1

**Owner Information** 

Name: LONGWOOD GARDENS INC

Mailing Address: PO BOX 501

KENNETT SQUARE, PA 19348-0501

**Plant Information** 

Plant: LONGWOOD GARDENS/KENNETT SQUARE

Location: 15 Chester County 15920 East Marlborough Township

SIC Code: 8422 Services - Botanical And Zoological Gardens

Responsible Official

Name: PAUL REDMAN Title: DIRECTOR Phone: (610) 388 - 1000

### Permit Contact Person

Name: KENNETH GRABLEWSKI

Title: V.P. - FACILITIES Phone: (610) 388 - 5234

[Signature]

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER





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

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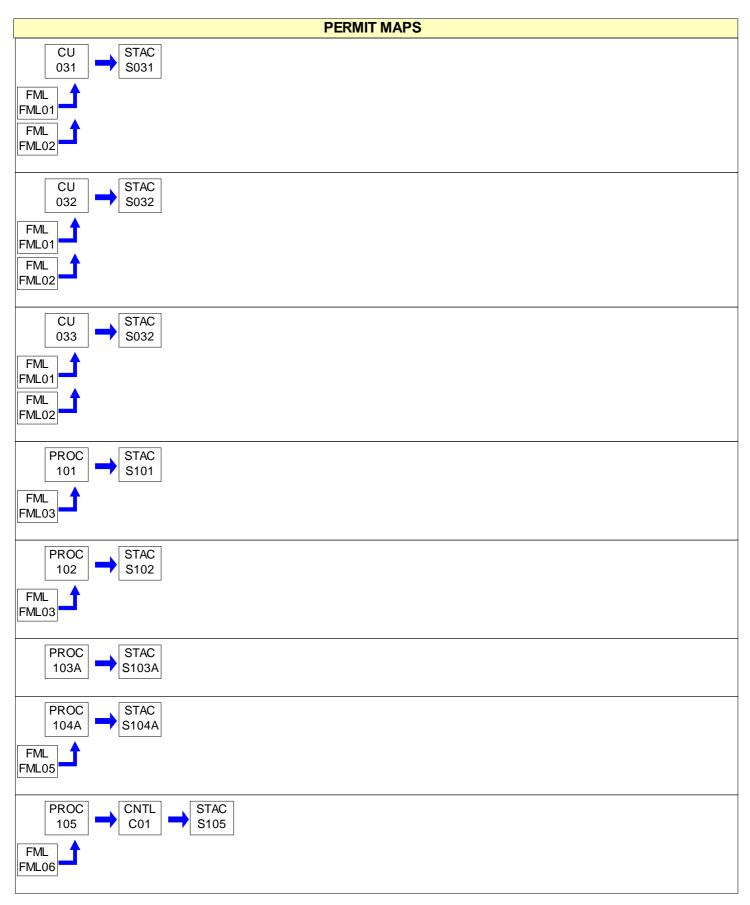


# **SECTION A.** Site Inventory List

Source	ID Source Name	Capacity/	Throughput	Fuel/Material
031	BOILER 1 (B21 A-K1)	31.000	MMBTU/HR	
		199.330	Th Gal/HR	#6 Oil
		31.000	MMCF/HR	Natural Gas
032	BOILER 2 (B21 A-K2)	10.400	MMBTU/HR	
		66.470	Th Gal/HR	#6 Oil
		10.400	MMCF/HR	Natural Gas
033	BOILER 3 (B21 A-K3)	23.600	MMBTU/HR	
		151.330	Th Gal/HR	#6 Oil
		23.600	MMCF/HR	Natural Gas
101	800 KW EMERGENCY GENERATOR 1 (B47-G1)	2.730	MMBTU/HR	
		19.930	Gal/HR	Diesel Fuel
102	800 KW EMERGENCY GENERATOR 2 (B47-G2)	2.730	MMBTU/HR	
		19.930	Gal/HR	Diesel Fuel
103A	200 KW EMERGENCY GENERATOR (B21-G1)	4.160	MMBTU/HR	
		4,075.000	CF/HR	Natural Gas
104A	200 KW EMERGENCY GENERATOR (B60-IT)	2.250	MMBTU/HR	
		16.400	Gal/HR	Diesel Fuel
105	2,250 KW STANDBY EMERGENCY GENERATOR 1 (B067-G1)	21.630	MMBTU/HR	
		157.900	Gal/HR	Diesel Fuel
106	2,250 KW STANDBY EMERGENCY GENERATOR 2 (B067-G2)	21.630	MMBTU/HR	
		157.900	Gal/HR	Diesel Fuel
202	SOLVENT CLEANING STATIONS	30.000	Gal/HR	SOLVENT
C01	SCR SYSTEM 1 W/ DIESEL EXHAUST FLUID			
C02	SCR SYSTEM 2 W/ DIESEL EXHAUST FLUID			
FML01	2-150,000 GALLON #6 OIL UST			
FML02	NATURAL GAS LINE			
FML03	6,000 GALLON DIESEL FUEL AST			
FML05	275 GALLON DIESEL AST			
FML06	25,000 GALLON DIESEL AST			
S031	BOILER 1 STACK			
S032	COMBINED BOILERS 2 & 3 STACK			
S101	800 KW EMERGENCY GENERATOR STACK			
S102	800 KW EMERGENCY GENERATOR STACK			
S103A	200 KW EMERGENCY GENERATOR STACK			
S104A	55 KW EMERGENCY GENERATOR STACK			
S105	2,250 KW STANDBY EMERGENCY GENERATOR 1			
	STACK			
S106	2,250 KW STANDBY EMERGENCY GENERATOR 2 STACK			
Z01	FUGITIVE EMISSIONS			

# **PERMIT MAPS**







# $\begin{array}{c} \text{PROC} \\ 106 \\ \hline \text{FML} \\ \hline \text{FML06} \\ \end{array} \longrightarrow \begin{array}{c} \text{STAC} \\ \text{S106} \\ \end{array}$ $\begin{array}{c} \text{PROC} \\ 202 \\ \hline \end{array} \longrightarrow \begin{array}{c} \text{STAC} \\ \text{Z01} \\ \end{array}$



#001 [25 Pa. Code § 121.1]

Definitions.

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

#002 [25 Pa. Code § 127.446]

**Operating Permit Duration.** 

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

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

Permit Renewal.

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

- (a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

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







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

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

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

**Transfer of Operating Permits.** 

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

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

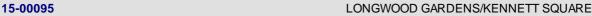
- (a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a source is located or emissions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

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

Compliance Requirements.

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







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

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

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

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

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

**Duty to Provide Information.** 

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

#010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

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

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

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

**Operating Permit Modifications** 

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





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:





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

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

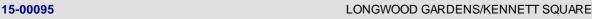
# #014 [25 Pa. Code § 127.3]

### Operational Flexibility.

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

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





- (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 Air Pollution Control Act (35 P.S. Section 4003).

### # 002 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

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

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) 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:
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (1) the emissions are of minor significance with respect to causing air pollution; and
- (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

### # 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 Condition #002(a) -- (i) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

### # 004 [25 Pa. Code §123.31]

### Limitations

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

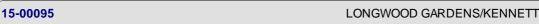
### # 005 [25 Pa. Code §123.41]

### Limitations

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

(a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour.





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

(b) Equal to or greater than 60% at any time.

### # 006 [25 Pa. Code §123.42]

### **Exceptions**

The emission limitations of Condition #005, of this Section, shall not apply to a visible emission in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

### # 007 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall ensure that the total emissions of nitrogen oxides (NOx) from this facility shall not exceed 24.9 ton per year, as a twelve (12) month rolling sum.

### # 008 [25 Pa. Code §129.14]

### Open burning operations

No person may permit the open burning of material in the Southeast Air Basin except where the open burning operations result from:

- (a) 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:
- (b) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;
- (c) a fire set for the prevention and control of disease or pests, when approved by the Department;
- (d) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation:
- (e) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;
- (f) a fire set solely for recreational or ceremonial purposes; or
- (g) a fire set solely for cooking food.

### **TESTING REQUIREMENTS.**

### # 009 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

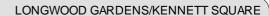
- (a) If, at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests deemed necessary by the Department to determine the actual emission rate(s).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

### # 010 [25 Pa. Code §139.16]

### Sulfur in fuel oil.

- (a) The following are applicable to tests for the analysis of commercial fuel oil:
- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of the Department, the person responsible for the operation of the source shall collect the sample employing







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

the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

- (2) Test methods and procedures for the determination of sulfur shall be those specified in the most recent revision of 25 Pa. Code § 139.4(12)--(15).
- (3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).
- (b) The testing requirements in paragraph (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

### III. MONITORING REQUIREMENTS.

### # 011 [25 Pa. Code §123.43]

### Measuring techniques

Visible emissions may be measured using either of the following:

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

### # 012 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]

- (a) The permittee shall monitor the facility, once per operating day, for the following:
- (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
- (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).
- (b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee:
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.
- (c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.
- (d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.
- (e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

# # 013 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall monitor the total nitrogen oxides (NOx) emissions from the facility on a monthly basis, and as a 12-month rolling sum.



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

### IV. RECORDKEEPING REQUIREMENTS.

### # 014 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a) emissions increase of minor significance without notification to the Department.
- (b) de minimis increases with notification to the Department, via letter.
- (c) increases resulting from a Request for Determination (RFD) to the Department.
- (d) increases resulting from the issuance of a plan approval and subsequent operating permit.

### # 015 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) date, time, and location of the incident(s);
- (b) the cause of the event; and
- (c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

### # 016 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

All records, reports, and analysis results generated in compliance with the requirements of any section of this permit shall be maintained in accordance with General State Only Requirement #020(b) and shall be made available to the Department upon written or verbal request within a reasonable time.

### # 017 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall calculate and maintain records of the total nitrogen oxides (NOx) emissions from the facility, on a monthly basis and as a 12-month rolling sum.

### # 018 [25 Pa. Code §129.82]

### Control of VOCs from gasoline dispensing facilities (Stage II)

The owners or operators of gasoline dispensing facilities shall maintain records of monthly gasoline throughput, the type and duration of any failures of the system (Stage II Vapor Recovery System) and maintenance and repair records. The records shall be kept for at least five (5) years and shall be made available for inspection by the Department.

### # 019 [25 Pa. Code §135.5]

### Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with 25 Pa. Code §§ 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

### V. REPORTING REQUIREMENTS.

### # 020 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR Part 68.]

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section





# **SECTION C.** Site Level Requirements

112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the threshold quantity at a facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
- (i) Three years after the date on which a regulated substance is first listed under 40 CFR § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If this facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that this facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If this facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When this facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if the permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

### # 021 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

- (a) The permittee shall, within two (2) hours, of becoming knowledgeable, of any occurrence, notify the Department, at (484) 250-5920, of any malfunction of the source(s) or associated air pollution control devices listed in Section A, of this permit, which results in, or may possibly result in, the emission of air contaminants in excess of the limitations specified in this permit, or regulation contained in 25 Pa. Code Article III.
- (b) Malfunction(s) which occur at this facility, and pose(s) an imminent danger to public health, safety, welfare and the environment, and would violate permit conditions if the source were to continue to operate after the malfunction, shall immediately be reported to the Department by telephone at the above number.
- (c) A written report shall be submitted to the Department within two (2) working days following the notification of the incident, and shall describe, at a minimum, the following:
- (1) The malfunction(s).
- (2) The emission(s).







### SECTION C. Site Level Requirements

- (3) The duration.
- (4) Any corrective action taken.

### # 022 [25 Pa. Code §135.3]

### Reporting

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The permittee, who has been previously advised by the Department to submit a source report, shall submit by March 1, of each year, a source report for the preceding calendar year. The report shall include information from all previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported, including those sources listed in the Miscellaneous Section of this permit.

The permittee may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

### VI. WORK PRACTICE REQUIREMENTS.

### # 023 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

A person responsible for any source specified in Condition #002, above, shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (a) use, where possible, of water or suitable chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (b) application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (c) paving and maintenance of roadways.
- (d) 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.

### # 024 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #013(g), of Section B, of this permit.

### # 025 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A, of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

### # 026 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The permittee shall ensure that the source(s) and air pollution control device(s), listed in Section A and Section G, where applicable, of this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.







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

### # 027 [25 Pa. Code §129.82]

### Control of VOCs from gasoline dispensing facilities (Stage II)

The owners or operators, or both, of gasoline dispensing facilities subject to the requirements of this section shall:

- (a) Install necessary Stage II vapor collection and control systems, provide necessary maintenance and make modifications necessary to comply with the requirements.
- (b) Provide adequate training and written instructions to the operator of the affected gasoline dispensing facility to assure proper operation of the system.
- (c) Immediately remove from service and tag any defective nozzle or dispensing system until the defective component is replaced or repaired. A component removed from service may not be returned to service until the defect is corrected. If the Department finds that a defective nozzle or dispensing system is not properly tagged during an inspection, the component may not be returned to service until the defect is corrected, and the Department approves its return to service.
- (d) Conspicuously post operating instructions for the system in the gasoline dispensing area which, at a minimum, include:
- (1) A clear description of how to correctly dispense gasoline with the vapor recovery nozzles utilized at the site.
- (2) A warning that continued attempts to dispense gasoline after the system indicates that the vehicle fuel tank is full may result in spillage or recirculation of the gasoline into the vapor collection system.

### [25 Pa. Code §129.82]

### Control of VOCs from gasoline dispensing facilities (Stage II)

The owners or operators of gasoline dispensing facilities shall comply with the functional testing and certification requirements specified in EPA's Stage II Enforcement and Technical Guidance Document developed under Section 182 of the Clean Air Act to meet the Clean Air Act requirements.

### ADDITIONAL REQUIREMENTS.

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

### VIII. COMPLIANCE CERTIFICATION.

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

### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.



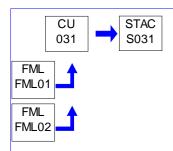


Source ID: 031 Source Name: BOILER 1 (B21 A-K1)

Source Capacity/Throughput: 31.000 MMBTU/HR

199.330 Th Gal/HR #6 Oil

31.000 MMCF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

### # 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 any combustion unit, in the Southeast Air Basin, in excess of 1.2 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

### Fuel Restriction(s).

### # 003 [25 Pa. Code §123.22]

### **Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil (i.e., No. 6 fuel oil) for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 1.0% by weight, pursuant to 25 Pa. Code §123.22(e)(2).

### # 004 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall ensure that only natural gas or No. 6 fuel oil shall be used as fuel for this combustion source.

# **Throughput Restriction(s).**

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall ensure that the total throughput of No. 6 oil used for Boiler 1 (B21 A-K1), Boiler 2 (B21 A-K2) and Boiler 3 (B21 A-K3) (Source ID(s): 031, 032, and 033) shall not exceed 1,170,000 gallons per year.

### II. TESTING REQUIREMENTS.

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



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

### MONITORING REQUIREMENTS.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following for Boiler 1 (B21 A-K1) (Source ID: 031) on a daily basis, when operating:

- (a) The amount and type of fuel used.
- (b) The hours of operation.

### IV. RECORDKEEPING REQUIREMENTS.

### # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for Boiler 1 (B21 A-K1) (Source ID: 031) on a daily basis, when operating:

- (a) The amount and type of fuel used.
- (b) The hours of operation.

### # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that each adjustment conducted under the tune-up procedures for Boiler 1 (B21 A-K1) (Source ID: 031), shall be recorded in a Department-approved electronic format, which contains the following:

- (a) The date of the tuning procedure.
- (b) The name of the service company and technician.
- (c) The final operating rate or load.
- (d) The final CO and NOx emission rates.
- (e) The final excess oxygen rate.

### 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 §127.441]

Operating permit terms and conditions.

- (a) The permittee shall perform an annual tune-up on the combustion process for Boiler 1 (B21 A-K1) (Source ID: 031). The annual tune-up shall consist of, at a minimum, the following:
- (1) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NOx, and to the extent practicable, minimize the emissions of CO.
- (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (b) The annual combustion tune-up shall be made in accordance with EPA document "Combustion Efficiency Optimization





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

Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-340/1-83-023) or equivalent procedures approved by the Department in writing.

### VII. ADDITIONAL REQUIREMENTS.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Boiler 1 (B21-A-K1) (Source ID: 031) is manufactured by Keeler Dorr-Oliver, model no. Keeler DK-10-9 VP-16.

# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11193]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Am I subject to this subpart?

- (a) This combustion unit is exempted from the regulatory requirements of §40 CFR 63, Subpart JJJJJJ, in the category of "gas-fired boiler".
- (b) A "gas-fired boiler" includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply interruption, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- (c) Usage of liquid fuel in exceedance of the 48 hours per year for periodic testing, maintenance, or operator training will result in the loss of the exemption status as a "gas-fired boiler" and this combustion unit will be subjected to the applicable requirements of §40 CFR 63, Subpart JJJJJJ.



SECTION D.

15-00095



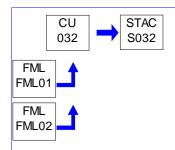
Source ID: 032 Source Name: BOILER 2 (B21 A-K2)

**Source Level Requirements** 

Source Capacity/Throughput: 10.400 MMBTU/HR

66.470 Th Gal/HR #6 Oil

10.400 MMCF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

### # 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 any combustion unit, in the Southeast Air Basin, in excess of 1.2 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

### Fuel Restriction(s).

### # 003 [25 Pa. Code §123.22]

### **Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil (i.e., No. 6 fuel oil) for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 1.0% by weight, pursuant to 25 Pa. Code §123.22(e)(2).

### # 004 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall ensure that only natural gas or No. 6 fuel oil shall be used as fuel for this combustion source.

# **Throughput Restriction(s).**

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall ensure that the total throughput of No. 6 oil used for Boiler 1 (B21 A-K1), Boiler 2 (B21 A-K2) and Boiler 3 (B21 A-K3) (Source ID(s): 031, 032, and 033) shall not exceed 1,170,000 gallons per year.

### II. TESTING REQUIREMENTS.

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



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

### III. MONITORING REQUIREMENTS.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following for Boiler 2 (B21 A-K2) (Source ID: 032) on a monthly basis, when operating:

- (a) The amount and type of fuel used.
- (b) The hours of operation.

### IV. RECORDKEEPING REQUIREMENTS.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for Boiler 2 (B21 A-K2) (Source ID: 032) on a monthly basis, when operating:

- (a) The amount and type of fuel used.
- (b) The hours of operation.

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.93.]

The permitte shall ensure that Boiler 2 (B21 A-K2) (Source ID: 032) shall be operated and maintained in accordance with manufacturer's specifications.

### VII. ADDITIONAL REQUIREMENTS.

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Boiler 2 (B21-A-K2) (Source ID: 032) is manufactured by Keeler Dorr-Oliver, model no. Keeler WB-1-13 VP-13.

# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11193]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Am I subject to this subpart?

- (a) This combustion unit is exempted from the regulatory requirements of §40 CFR 63, Subpart JJJJJJ, in the category of "gas-fired boiler".
- (b) A "gas-fired boiler" includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply interruption, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- (c) Usage of liquid fuel in exceedance of the 48 hours per year for periodic testing, maintenance, or operator training will result in the loss of the exemption status as a "gas-fired boiler" and this combustion unit will be subjected to the applicable requirements of §40 CFR 63, Subpart JJJJJJ.



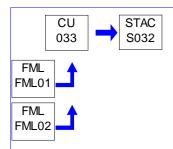


Source ID: 033 Source Name: BOILER 3 (B21 A-K3)

Source Capacity/Throughput: 23.600 MMBTU/HR

151.330 Th Gal/HR #6 Oil

23.600 MMCF/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 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

### # 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 any combustion unit, in the Southeast Air Basin, in excess of 1.2 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

### Fuel Restriction(s).

### # 003 [25 Pa. Code §123.22]

### **Combustion units**

No person may, at any time, offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil (i.e., No. 6 fuel oil) for use in combustion units in the Southeast Pennsylvania air basin which contains sulfur in excess of 1.0% by weight, pursuant to 25 Pa. Code §123.22(e)(2).

### # 004 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The permittee shall ensure that only natural gas or No. 6 fuel oil shall be used as fuel for this combustion source.

# **Throughput Restriction(s).**

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall ensure that the total throughput of No. 6 oil used for Boiler 1 (B21 A-K1), Boiler 2 (B21 A-K2) and Boiler 3 (B21 A-K3) (Source ID(s): 031, 032, and 033) shall not exceed 1,170,000 gallons per year.

### II. TESTING REQUIREMENTS.

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







### MONITORING REQUIREMENTS.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following for Boiler 3 (B21 A-K3) (Source ID: 033) on a weekly basis, when operating:

- (a) The amount and type of fuel used.
- (b) The hours of operation.

### IV. RECORDKEEPING REQUIREMENTS.

### # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for Boiler 3 (B21 A-K3) (Source ID: 033) on a weekly basis, when operating:

- (a) The amount and type of fuel used.
- (b) The hours of operation.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that each adjustment conducted under the tune-up procedures for Boiler 3 (B21 A-K3) (Source ID: 033), shall be recorded in a Department-approved electronic format, which contains the following:

- (a) The date of the tuning procedure.
- (b) The name of the service company and technician.
- (c) The final operating rate or load.
- (d) The final CO and NOx emission rates.
- (e) The final excess oxygen rate.

### 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 §127.441]

Operating permit terms and conditions.

- (a) The permittee shall perform an annual tune-up on the combustion process for Boiler 3 (B21 A-K3) (Source ID: 033). The annual tune-up shall consist of, at a minimum, the following:
- (1) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NOx, and to the extent practicable, minimize the emissions of CO.
- (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (b) The annual combustion tune-up shall be made in accordance with EPA document "Combustion Efficiency Optimization







Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-340/1-83-023) or equivalent procedures approved by the Department in writing.

### VII. ADDITIONAL REQUIREMENTS.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Boiler 3 (B21-A-K3) (Source ID: 031) is manufactured by Keeler Dorr-Oliver, model no. Keeler WB-1-14 1/2 VP-14.

# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11193]

SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

Am I subject to this subpart?

- (a) This combustion unit is exempted from the regulatory requirements of §40 CFR 63, Subpart JJJJJJ, in the category of "gas-fired boiler".
- (b) A "gas-fired boiler" includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply interruption, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.
- (c) Usage of liquid fuel in exceedance of the 48 hours per year for periodic testing, maintenance, or operator training will result in the loss of the exemption status as a "gas-fired boiler" and this combustion unit will be subjected to the applicable requirements of §40 CFR 63, Subpart JJJJJJ.

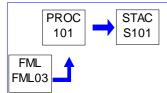




Source ID: 101 Source Name: 800 KW EMERGENCY GENERATOR 1 (B47-G1)

Source Capacity/Throughput: 2.730 MMBTU/HR

19.930 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 this source in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

### # 002 [25 Pa. Code §123.21]

### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this 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 §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall ensure that the 800-kW Emergency Generator (Source ID: 101) shall be limited to an emission rate of 24.03 pounds per hour for nitrogen oxides (NOx).
- (b) The permittee shall ensure that total, combined NOx emissions for the two 800-kW Emergency Generators (Source ID(s): 101 and 102) shall be limited to 12.02 tons per year, as a twelve (12) month rolling sum.

### # 004 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall ensure that the 800-kW Emergency Generator (Source ID: 101) shall be limited to an emission rate of 6.38 pounds per hour for carbon monoxide (CO).
- (b) The permittee shall ensure that total, combined CO emissions for the two 800-kW Emergency Generators (Source ID(s): 101 and 102) shall be limited to 3.20 tons per year, as a twelve (12) month rolling sum.

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

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The company shall not operate each diesel-fired emergency generator (Source ID(s): 101 and 102) for greater than 500 hours per year, based on a 12-month rolling sum.

# **Throughput Restriction(s).**

### # 006 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permitee shall ensure that the fuel usage for each diesel fueled emergency generator (Source ID(s): 101 and 102) shall not exceed 50 gallons per hour, averaged monthly.

[Compliance with this condition assures compliance with the NOx and CO pound/hour limits expressed in Conditions #003 and #004, respectively]





### # 007 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permitee shall ensure that the fuel usage for each diesel fueled emergency generator (Source ID(s): 101 and 102) shall not exceed 25,350 gallons per year, as a 12-month rolling sum.

[Compliance with this condition assures compliance with the operating hour limit and NOx and CO tons per year limits expressed in Conditions #005, and #003(b) and #004(b), respectively]

### 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.

### # 008 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall monitor the hours of operation for each diesel-fired emergency generators (Source ID(s): 101 and 102) on a monthly basis and as a 12-month rolling sum, when operating.

### [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall monitor the fuel usage for each diesel-fired emergency generators (Source ID(s): 101 and 102) on an average monthly basis and as a 12-month rolling sum, when operating.

### # 010 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall calculate the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 800-kW Emergency Generator (Source ID: 101) on a monthly basis and as a twelve (12) month rolling sum.

### IV. RECORDKEEPING REQUIREMENTS.

### [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain records of the hours of operation for each diesel-fired emergency generators (Source ID(s): 101 and 102) on a monthly basis and as a 12-month rolling sum, when operating.

### # 012 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall maintain records of the fuel usage for each diesel-fired emergency generators (Source ID(s): 101 and 102) on an average monthly basis and as a 12-month rolling sum, when operating.

### # 013 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permittee shall calculate and maintain records of the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 800-kW Emergency Generator (Source ID: 101) on a monthly basis and as a twelve (12) month rolling sum.

### 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.

### # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The 800-kW Emergency Generator is manufactured by Spectrum Detroit Diesel, model no. 800DS60.
- (b) The listed capacity/throughput data of 19.93 gallons per hour (diesel fuel) for this source is an average value operating with a normal load. Previous testing results have a capacity/throughput of 67.23 gallons per hour, while operating at a 97.25% load for 5.167 hours and burning 347.5 gallons of diesel fuel.

### # 015 [25 Pa. Code §129.203]

Stationary internal combustion engines.

- (a) The owner or operator of a stationary internal combustion engine rated at greater than 1,000 horsepower and located in Bucks, Chester, Delaware, Montgomery or Philadelphia County shall comply with this section and 25 Pa. Code § 129.204 (relating to emission accountability).
- (b) By October 31 of each year, the owner or operator of the stationary internal combustion engine shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.
- (c) The owner or operator shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in subparagraph (1).
- (1) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour.
- (d) Emissions from a stationary internal combustion engine that has been or is replaced by an electric motor may be counted as allowable emissions for purposes of this section and 25 Pa. Code § 129.204, as follows:
- (1) For a replaced compression ignition stationary internal combustion engine that fired diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour, less 1.5 pounds of NOx per MWH of electricity consumed by the replacement motor.

# # 016 [25 Pa. Code §129.204]

Emission accountability.

- (a) The owner or operator of a stationary internal combustion engine shall determine actual emissions in accordance with one of the following:
- (1) If the owner or operator of the unit is required to monitor NOx emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, the CEMS data reported to the Department to comply with the monitoring and reporting requirements of this article shall be used. Any data invalidated under Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (2) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx:
- (i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.
  - (ii) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:



- (A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
- (B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.
- (iii) CEMS data, if the owner or operator elects to monitor NOx emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.
- (b) The owner or operator of a unit subject to this section shall surrender to the Department one NOx allowance, as defined in 25 Pa. Code § 145.2 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.
- (d) November 1 of each year, an owner or operator of a unit subject to this section shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (e) If an owner or operator fails to comply with subsection (d), the owner or operator shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.
- (f) The surrender of NOx allowances under subsection (e) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.
- (1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.
  - (2) Each ton of excess emissions is a separate violation.

# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6580]

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

What is the purpose of subpart ZZZZ?





(b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 63.6640(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for nonemergency engines.

### # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

- (a) The owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of hazardous air pollutants (HAPs) is subjected to this regulation.
- (b) Based on its potential to emit, Longwood Gardens is an area or minor source of HAP emissions and the two (2) existing 800-kW diesel fuel-fired generators (Source ID(s): 101 and 102) are subject to the provisions of §40 CFR 63, Subpart ZZZZ.

### [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]

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

When do I have to comply with this subpart?

The owner or operator of an existing stationary compression ignition (CI) RICE located at an area source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

### # 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

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

[Additional authority for this permit condition was obtained from 25 Pa. Code § 127.441 and Table 2d of §40 CFR 63, Subpart ZZZZ.]

- (a) The owner or operator of existing emergency stationary CI RICE located at area sources of HAP emissions must meet the following requirement, except during periods of startup:
  - (i) Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - (ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- (iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The owner or operator has the option to utilize an oil analysis program as described in §40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.]

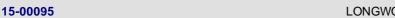
(b) During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

### # 021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

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

What are my general requirements for complying with this subpart?

(a) The owner or operator of a stationary RICE must be in compliance with the applicable emission limitations and operating limitations in this subpart that apply at all times.





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

### # 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6612]

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

By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake (please see below)

- (a) The owner or operator of an existing stationary RICE located at an area source of HAP emissions must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in §40 CFR 63.7(a)(2).
- (b) The owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (b)(4).
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
  - (2) The test must not be older than two (2) years.
  - (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The owner or operator of an existing emergency stationary RICE located at an area source of HAP emissions must install a non-resettable hour meter if one is not already installed.

### # 024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

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

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 63.6640(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 63.6640(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

### # 025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

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

What records must I keep?

(a) The owner or operator of an existing stationary RICE located at an area source of HAP emissions you must keep records





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

of the hours of operation of the engine that is recorded through the non-resettable hour meter.

- (b) The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
- (c) If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
- (d) The owner or operator of an existing stationary RICE must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the unit and any after-treatment control device was operated and maintained according to your own maintenance plan.

# 026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

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

In what form and how long must I keep my records?

The owner or operator must keep each record readily accessible in hard copy or electronic form for at least five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §40 CFR 63.10(b)(1).

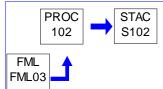




Source ID: 102 Source Name: 800 KW EMERGENCY GENERATOR 2 (B47-G2)

Source Capacity/Throughput: 2.730 MMBTU/HR

19.930 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 this source in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

### # 002 [25 Pa. Code §123.21]

### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this 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 §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall ensure that the 800-kW Emergency Generator (Source ID: 102) shall be limited to an emission rate of 24.03 pounds per hour for nitrogen oxides (NOx).
- (b) The permittee shall ensure that the total, combined NOx emissions for the two 800-kW Emergency Generators (Source ID(s): 101 and 102) shall be limited to 12.02 tons per year, as a twelve (12) month rolling sum.

### # 004 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall ensure that the 800-kW Emergency Generator (Source ID: 102) shall be limited to an emission rate of 6.38 pounds per hour for carbon monoxide (CO).
- (b) The permittee shall ensure that the total, combined CO emissions for the two 800-kW Emergency Generators (Source ID(s): 101 and 102) shall be limited to 3.20 tons per year, as a twelve (12) month rolling sum.

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

### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The company shall not operate each diesel-fired emergency generator (Source ID(s): 101 and 102) for greater than 500 hours per year, based on a 12-month rolling sum.

# **Throughput Restriction(s).**

### # 006 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The permitee shall ensure that the fuel usage for each diesel fueled emergency generator (Source ID(s): 101 and 102) shall not exceed 50 gallons per hour, averaged monthly.

[Compliance with this condition assures compliance with the NOx and CO pound/hour limits expressed in Conditions #003 and #004, respectively]



**25-00095** 



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

#### # 007 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permitee shall ensure that the fuel usage for each diesel fueled emergency generator (Source ID(s): 101 and 102) shall not exceed 25,350 gallons per year, as a 12-month rolling sum.

[Compliance with this condition assures compliance with the operating hour limit and NOx and CO tons per year limits expressed in Conditions #005, and #003(b) and #004(b), respectively]

#### 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.

#### # 008 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall monitor the hours of operation for each diesel-fired emergency generators (Source ID(s): 101 and 102) on a monthly basis and as a 12-month rolling sum, when operating.

#### # 009 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall monitor the fuel usage for each diesel-fired emergency generators (Source ID(s): 101 and 102) on an average monthly basis and as a 12-month rolling sum, when operating.

#### # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall calculate the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 800-kW Emergency Generator (Source ID: 102) on a monthly basis and as a twelve (12) month rolling sum.

#### IV. RECORDKEEPING REQUIREMENTS.

### # 011 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall maintain records of the hours of operation for each diesel-fired emergency generators (Source ID(s): 101 and 102) on a monthly basis and as a 12-month rolling sum, when operating.

#### # 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain records of the fuel usage for each diesel-fired emergency generators (Source ID(s): 101 and 102) on an average monthly basis and as a 12-month rolling sum, when operating.

# # 013 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall calculate and maintain records of the NOx and CO emissions from the 800-kW Emergency Generator (Source ID: 102) on a monthly basis and as a twelve (12) month rolling sum.

#### V. REPORTING REQUIREMENTS.

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

# 15-00095



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

#### # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (a) The 800-kW Emergency Generator is manufactured by Spectrum Detroit Diesel, model no. 800DS60.
- (b) The listed capacity/throughput data of 19.93 gallons per hour (diesel fuel) for this source is an average value operating with a normal load. Previous testing results have a capacity/throughput of 67.23 gallons per hour, while operating at a 97.25% load for 5.167 hours and burning 347.5 gallons of diesel fuel.

#### [25 Pa. Code §129.203]

Stationary internal combustion engines.

- (a) The owner or operator of a stationary internal combustion engine rated at greater than 1,000 horsepower and located in Bucks, Chester, Delaware, Montgomery or Philadelphia County shall comply with this section and 25 Pa. Code § 129.204 (relating to emission accountability).
- (b) By October 31 of each year, the owner or operator of the stationary internal combustion engine shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.
- (c) The owner or operator shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in subparagraph (1).
- (1) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour.
- (d) Emissions from a stationary internal combustion engine that has been or is replaced by an electric motor may be counted as allowable emissions for purposes of this section and 25 Pa. Code § 129.204, as follows:
- (1) For a replaced compression ignition stationary internal combustion engine that fired diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour, less 1.5 pounds of NOx per MWH of electricity consumed by the replacement motor.

#### #016 [25 Pa. Code §129.204]

**Emission accountability.** 

- (a) The owner or operator of a stationary internal combustion engine shall determine actual emissions in accordance with one of the following:
- (1) If the owner or operator of the unit is required to monitor NOx emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, the CEMS data reported to the Department to comply with the monitoring and reporting requirements of this article shall be used. Any data invalidated under Chapter 139 (relating to sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (2) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx:
- (i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.
  - (ii) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:

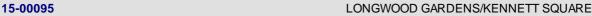


- (A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
- (B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.
- (iii) CEMS data, if the owner or operator elects to monitor NOx emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.
- (b) The owner or operator of a unit subject to this section shall surrender to the Department one NOx allowance, as defined in 25 Pa. Code § 145.2 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.
- (d) November 1 of each year, an owner or operator of a unit subject to this section shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (e) If an owner or operator fails to comply with subsection (d), the owner or operator shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.
- (f) The surrender of NOx allowances under subsection (e) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.
- (1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.
  - (2) Each ton of excess emissions is a separate violation.

# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6580]

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

What is the purpose of subpart ZZZZ?





- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 63.6640(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 63.6640(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for nonemergency engines.

#### # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

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

Am I subject to this subpart?

- (a) The owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of hazardous air pollutants (HAPs) is subjected to this regulation.
- (b) Based on its potential to emit, Longwood Gardens is an area or minor source of HAP emissions and the two (2) existing 800-kW diesel fuel-fired generators (Source ID(s): 101 and 102) are subject to the provisions of §40 CFR 63, Subpart ZZZZ.

#### [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]

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

When do I have to comply with this subpart?

The owner or operator of an existing stationary compression ignition (CI) RICE located at an area source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

#### # 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

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

[Additional authority for this permit condition was obtained from 25 Pa. Code § 127.441 and Table 2d of §40 CFR 63, Subpart ZZZZ.]

- (a) The owner or operator of existing emergency stationary CI RICE located at area sources of HAP emissions must meet the following requirement, except during periods of startup:
  - (i) Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - (ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- (iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The owner or operator has the option to utilize an oil analysis program as described in §40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.]

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

#### # 021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

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

What are my general requirements for complying with this subpart?

(a) The owner or operator of a stationary RICE must be in compliance with the applicable emission limitations and operating limitations in this subpart that apply at all times.



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

#### # 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6612]

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

By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake (please see below)

- (a) The owner or operator of an existing stationary RICE located at an area source of HAP emissions must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in § 63.6595 and according to the provisions in §40 CFR 63.7(a)(2).
- (b) The owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (b)(4).
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
  - (2) The test must not be older than two (2) years.
  - (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

#### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The owner or operator of an existing emergency stationary RICE located at an area source of HAP emissions must install a non-resettable hour meter if one is not already installed.

#### # 024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

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

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 63.6640(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 63.6640(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

# # 025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

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

What records must I keep?

(a) The owner or operator of an existing stationary RICE located at an area source of HAP emissions you must keep records





of the hours of operation of the engine that is recorded through the non-resettable hour meter.

- (b) The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
- (c) If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
- (d) The owner or operator of an existing stationary RICE must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the unit and any after-treatment control device was operated and maintained according to your own maintenance plan.

#### # 026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

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

In what form and how long must I keep my records?

The owner or operator must keep each record readily accessible in hard copy or electronic form for at least five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §40 CFR 63.10(b)(1).



Source ID: 103A Source Name: 200 KW EMERGENCY GENERATOR (B21-G1)

Source Capacity/Throughput: 4.160 MMBTU/HR

4,075.000 CF/HR Natural Gas

PROC STAC S103A

#### 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 this source in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

# 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this 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 §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.14(a)(8).]

The permittee shall ensure that the total, combined NOx emissions from the exempted emergency generator engines on site shall not exceed the following limits:

- (a) 100 lbs/hr
- (b) 1,000 lbs/day
- (c) 2.75 tons per ozone season, and
- (d) 6.6 tpy, as a 12-month rolling sum.

#### Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the 200-kW Emergency Generator (Source ID: 103A) only burns natural gas when operating.

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall monitor the following for the 200-kW Emergency Generator (Source ID: 103A):

- (a) The emissions of VOC, NOx, and CO on a monthly basis.
- (b) The number of hours spent for emergency operation, including what classified the operation as an emergency.
- (c) The number of hours spent for non-emergency operation.





#### IV. RECORDKEEPING REQUIREMENTS.

15-00095

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for the 200-kW Emergency Generator (Source ID: 103A):

- (a) The emissions of VOC, NOx, and CO on a monthly basis.
- (b) The number of hours spent for emergency operation, including what classified the operation as an emergency.
- (c) The number of hours spent for non-emergency operation.

#### 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.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency generator engine is manufactured by Cummins, model number GTA19 CC and is used to provide backup power to the boiler room.

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60 Subpart JJJJ Table 1] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Table 1 to Subpart JJJJ of Part 60.--

Table 1 to §40 CFR 60, Subpart JJJJ - NOX, CO, AND VOC Emission Standards for Stationary Emergency Engines with maximum engine power greater than 25 HP.

Engine Type	Max. Engine Power	Manufacture Date	Emission Limits (g/hp-hr)	Emission Limits (ppmvd @15% O2)
			NOx CO VOC	NOx CO VOC*
Emergency	HP>130	1/1/2009	2.0 4.0 1.0	160 540 86

[\*Formaldehyde emissions should not be included.]

# 009 [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 owner or operator of a stationary spark ignition (SI) reciprocating internal combustion engine, that commenced construction on or after January 1, 2009 is subjected to this regulation:
- (b) The natural gas-fired 200-kW Emergency Generator (B21-G1) (Source ID: 103A) is subject to the provisions of §40 CFR 60, Subpart JJJJ.

# 010 [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 permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version





of 40 C.F.R. Section 60.4243(d).

- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4243(d), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart JJJJ and must meet all requirements for non-emergency engines.
- # 011 [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) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) must comply with the emission standards in Table 1.
- (b) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR 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.
- # 012 [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 the stationary SI ICE to achieve the emission standards rrequired in §40 CFR 60.4233 over the entire life of the engine.

- # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
  Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
  What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?
- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4243(d).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4243(d), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart JJJJ and must meet all requirements for non-emergency engines.
- # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
  Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
  What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

The owners and operators of stationary SI ICE must keep records of the following:

- (a) All notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all documentation supporting any notification.
- (b) Maintenance conducted on the engine.
- (c) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in §§40 CFR 90, 1048, 1054, and 1060, as applicable.
- (d) 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 §40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.

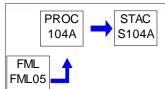




Source ID: 104A Source Name: 200 KW EMERGENCY GENERATOR (B60-IT)

Source Capacity/Throughput: 2.250 MMBTU/HR

16.400 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 this source in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

#### # 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this 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 §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.14(a)(8).]

The permittee shall ensure that the total, combined NOx emissions from the exempted emergency generator engines on site shall not exceed the following limits:

- (a) 100 lbs/hr
- (b) 1,000 lbs/day
- (c) 2.75 tons per ozone season, and
- (d) 6.6 tpy, as a 12-month rolling sum.

#### Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the 200-kW Emergency Generator (Source ID: 104A) only burns diesel fuel when operating.

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall monitor the following for the 200-kW Emergency Generator (Source ID: 104A):

- (a) The emissions of VOC, NOx and CO on a monthly basis.
- (b) The fuel usage on a monthly basis.
- (c) The number of hours spent for emergency operation, including what classified the operation as an emergency.



(d) The number of hours spent for non-emergency operation.

#### IV. RECORDKEEPING REQUIREMENTS.

15-00095

#### # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following for the 200-kW Emergency Generator (Source ID: 104A):

- (a) The emissions of VOC, NOx and CO on a monthly basis.
- (b) The fuel usage on a monthly basis.
- (c) The number of hours spent for emergency operation, including what classified the operation as an emergency.
- (d) The number of hours spent for non-emergency operation.

#### 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.

#### # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency generator engine is manufactured by Cummins, model number QSL9-G2, NR3 and is used to provide backup power to the Nuttery Building Data Center.

# 008 [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?

The provisions of this subpart are applicable to the owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where the stationary CI ICE was manufactured after April 1, 2006, and are not fire pump engines.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine
manufacturer?

[Additional authority for this permit condition is also obtained from §§40 CFR 89.112.]

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified below:

For engines with a maximum engine power greater than or equal to 37 kW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in §40 CFR 89.112 for all pollutants for model year 2007.







(a) For this unit, the emissions standards, model year and engine power rating are as follows:

Rated Power Tier Model Year NMHC + NOx CO (kW) 130<kW<225 Tier 3 2006 4.0 3.5 0.20

[Note: All of the above emission limits are in g/kW-hr unit]

Exhaust emissions of oxides of nitrogen oxide (NOx), carbon monoxide (CO), hydrocarbon, and nonmethane hydrocarbon (NMHC) are measured using the procedures set forth in subpart E of this part.

# 010 [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 Cl internal combustion engine?

The 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 §40 CFR 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.

[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?

The owners and operators of stationary CI ICE must operate and maintain the stationary CI ICE to achieve the emissions standards required in §40 CFR 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

# 012 [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?

[Additional authority for this permit condition is also derived from §40 CFR 80.510(b)]

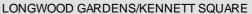
- (a) The owners and operators of stationary CI ICE that is subject to this subpart with a displacement of less than 30 liters per cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- (b) Per §40 CFR 80.510(b), all nonroad and diesel fuel is subject to the following per-gallon standards:
  - (1) Sulfur content: 15 ppm maximum for nonroad diesel fuel.
  - (2) Cetane index or aromatic content:
    - (i) A minimum cetane index of 40; or
    - (ii) A maximum aromatic content of 35 volume percent.

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

The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine.









- # 014 [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) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for nonemergency engines.
- # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

The owner or operator of a stationary CI internal combustion engine that is an emergency stationary internal combustion engine is not required to submit an initial notification.



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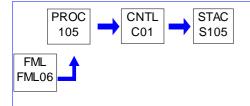


#### SECTION D. Source Level Requirements

Source ID: 105 Source Name: 2,250 KW STANDBY EMERGENCY GENERATOR 1 (B067-G1)

Source Capacity/Throughput: 21.630 MMBTU/HR

157.900 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 this source in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

#### # 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this 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 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

[Additional authority for this permit condition is also derived from §40 CFR 89.112]

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in the paragraph below.

For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in §40 CFR 89.112 for all pollutants.

(a) For this unit, the emissions standards, model year and engine power rating are as follows:

Rated Power Tier Model Year NMHC+NOx CO PM (kW)

kW>560 Tier 2 2006 6.4 3.5 0.20

[Note: All of the above emission limits are in g/kW-hr unit]

#### Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure that the 2,250-kW Standby Emergency Generator burns only diesel fuel when operating.

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

#### # 005 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the 2,250-kW Standby Emergency Generator shall not be operated for more than 500 hours per year, as a twelve (12) month rolling sum.



SECTION D.



**Source Level Requirements** 

#### II. TESTING REQUIREMENTS.

# # 006 [25 Pa. Code §127.441] Operating permit terms and conditions.

- (a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed (2017) and ending on December 31, five years later (2022). Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of this manual has been revised since approval, a new protocol must be submitted for approval.
- (b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (c) The stack test shall, at a minimum, test for NOx, CO and VOC. Tests shall be conducted in accordance with the provisions of EPA Method 7 or other Department approved methodology and 25 Pa. Code Chapter 139.
- (d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.
- (e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.
- (f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

#### III. MONITORING REQUIREMENTS.

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

- (a) The permittee shall monitor the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 2,250-kW Standby Emergency Generator 1 (Source ID: 105) on a monthly basis and as a twelve (12) month rolling sum.
- (b) The permittee shall monitor the hours of operation from the 2,250-kW Standby Emergency Generator 1 (Source ID: 105) on a monthly basis and as a twelve (12) month rolling sum.
- (c) The permittee shall monitor the fuel type used for the 2,250-kW Standby Emergency Generator 1 (Source ID: 105) on a daily and monthly basis.

#### IV. RECORDKEEPING REQUIREMENTS.

## # 008 [25 Pa. Code §127.441] Operating permit terms and conditions.

- (a) The permittee shall calculate and maintain records of the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 2,250-kW Standby Generator 1 (Source ID: 105) on a monthly basis and as a twelve (12) month rolling sum.
- (b) The permittee shall maintain records of the hours of operation from the 2,250-kW Standby Emergency Generator 1 (Source ID: 105) on a monthly basis and as a twelve (12) month rolling sum.
- (c) The permittee shall maintain records of the fuel type used for the 2,250-kW Standby Emergency Generator 1 (Source ID: 105) on a daily and monthly basis.



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#### LONGWOOD GARDENS/KENNETT SQUARE



#### SECTION D. **Source 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 §127.441]

Operating permit terms and conditions.

The permittee shall ensure that the Selective Catalytic Reduction (SCR) NOx control device wih Diesel Exhaust Fluid (DEF) is operating whenever the 2,250-kW Standby Emergency Generator is operating.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The 2,250 kW Standby Emergency Generator 1 (Source ID: 105) is manufactured by Cummins Power Systems, Model No. QSK60-G-1, has a 16-cylinder diesel engine with an electrical power capacity of 3,280 bhp. The unit is used as the primary alternate or backup power source for the facility.

#### [25 Pa. Code §127.441] # 011

#### Operating permit terms and conditions.

The 2,250-kW Standby Emergency Generator is manufacured by Cummins Power System, model number QSK60-G1. This generator has an electical output power capacity of 3,280-bhp and is equipped with a Cummins, Selective Catalytic Reduction (SCR) control device, model number CA452. The SCR uses vanadium pentoxide as the oxidation catalyst and uses Diesel Exhaust Fluid (DEF) to reduce NOx emissions.

#### # 012 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

- (a) The owner or operator of a stationary internal combustion engine rated at greater than 1,000 horsepower and located in Bucks, Chester, Delaware, Montgomery or Philadelphia County shall comply with this section and 25 Pa. Code § 129.204 (relating to emission accountability).
- (b) By October 31 of each year, the owner or operator of the stationary internal combustion engine shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.
- (c) The owner or operator shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in subparagraph (1).
- (1) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour.
- (d) Emissions from a stationary internal combustion engine that has been or is replaced by an electric motor may be counted as allowable emissions for purposes of this section and 25 Pa. Code § 129.204, as follows:
- (1) For a replaced compression ignition stationary internal combustion engine that fired diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour, less 1.5 pounds of NOx per MWH of electricity consumed by the replacement motor.

#### # 013 [25 Pa. Code §129.204]

#### Emission accountability.

- (a) The owner or operator of a stationary internal combustion engine shall determine actual emissions in accordance with one of the following:
- (1) If the owner or operator of the unit is required to monitor NOx emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, the CEMS data reported to the Department to comply with the monitoring and reporting requirements of this article shall be used. Any data invalidated under Chapter 139 (relating to



sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

- (2) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx:
- (i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.
  - (ii) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:
- (A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
- (B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.
- (iii) CEMS data, if the owner or operator elects to monitor NOx emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.
- (b) The owner or operator of a unit subject to this section shall surrender to the Department one NOx allowance, as defined in 25 Pa. Code § 145.2 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.
- (d) November 1 of each year, an owner or operator of a unit subject to this section shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (e) If an owner or operator fails to comply with subsection (d), the owner or operator shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.
- (f) The surrender of NOx allowances under subsection (e) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.



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

- (1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.
  - (2) Each ton of excess emissions is a separate violation.
- # 014 [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?

The provisions of this subpart are applicable to the owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where the stationary CI ICE was manufactured after April 1, 2006, and are not fire pump engines.

- # 015 [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 permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.
- # 016 [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 Cl internal combustion engine?

The 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 §40 CFR 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.

# 017 [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?

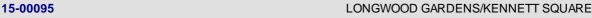
The owners and operators of stationary CI ICE must operate and maintain the stationary CI ICE to achieve the emissions standards required in §40 CFR 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

# 018 [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?

[Additional authority for this permit condition is also derived from §40 CFR 80.510(b)]

- (a) The owners and operators of stationary CI ICE that is subject to this subpart with a displacement of less than 30 liters per cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- (b) Per §40 CFR 80.510(b), all nonroad and diesel fuel is subject to the following per-gallon standards:
  - (1) Sulfur content: 15 ppm maximum for nonroad diesel fuel.
  - (2) Cetane index or aromatic content:







- (i) A minimum cetane index of 40; or
- (ii) A maximum aromatic content of 35 volume percent.
- # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine.

- # 020 [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) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for nonemergency engines.
- [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

The owner or operator of a stationary CI internal combustion engine that is an emergency stationary internal combustion engine is not required to submit an initial notification.



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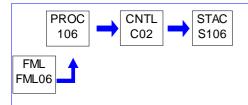


#### SECTION D. Source Level Requirements

Source ID: 106 Source Name: 2,250 KW STANDBY EMERGENCY GENERATOR 2 (B067-G2)

Source Capacity/Throughput: 21.630 MMBTU/HR

157.900 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 this source in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

#### # 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this 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 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202] Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

[Additional authority for this permit condition is also derived from §40 CFR 89.112]

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in the paragraph below.

For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in §40 CFR 89.112 for all pollutants.

(a) For this unit, the emissions standards, model year and engine power rating are as follows:

Rated Power Tier Model Year NMHC+NOx CO PM (kW)

kW>560 Tier 2 2006 6.4 3.5 0.20

[Note: All of the above emission limits are in g/kW-hr unit]

#### Fuel Restriction(s).

#### # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the 2,250-kW Standby Emergency Generator burns only diesel fuel when operating.

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

#### # 005 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the 2,250-kW Standby Emergency Generator shall not be operated for more than 500 hours per year, as a twelve (12) month rolling sum.





#### II. TESTING REQUIREMENTS.

# # 006 [25 Pa. Code §127.441] Operating permit terms and conditions.

- (a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed (2017) and ending on December 31, five years later (2022). Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of this manual has been revised since approval, a new protocol must be submitted for approval.
- (b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (c) The stack test shall, at a minimum, test for NOx, CO and VOC. Tests shall be conducted in accordance with the provisions of EPA Method 7 or other Department approved methodology and 25 Pa. Code Chapter 139.
- (d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.
- (e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.
- (f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

#### III. MONITORING REQUIREMENTS.

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

- (a) The permittee shall monitor the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 2,250-kW Standby Generator 2 (Source ID: 106) on a monthly basis and as a twelve (12) month rolling sum.
- (b) The permittee shall monitor the hours of operation from the 2,250-kW Standby Emergency Generator 2 (Source ID: 106) on a monthly basis and as a twelve (12) month rolling sum.
- (c) The permittee shall monitor the fuel type used for the 2,250-kW Standby Emergency Generator 2 (Source ID: 106) on a daily and monthly basis.

#### IV. RECORDKEEPING REQUIREMENTS.

## # 008 [25 Pa. Code §127.441] Operating permit terms and conditions.

- (a) The permittee shall calculate and maintain records of the emissions of nitrogen oxide (NOx) and carbon monoxide (CO) from the 2,250-kW Standby Generator 2 (Source ID: 106) on a monthly basis and as a twelve (12) month rolling sum.
- (b) The permittee shall maintain records of the hours of operation from the 2,250-kW Standby Emergency Generator 1 (Source ID: 105) on a monthly basis and as a twelve (12) month rolling sum.
- (c) The permittee shall maintain records of the fuel type used for the 2,250-kW Standby Emergency Generator 2 (Source ID: 106) on a daily and monthly basis.



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#### SECTION D. Source 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 §127.441]

#### Operating permit terms and conditions.

The permittee shall ensure that the Selective Catalytic Reduction (SCR) NOx control device wih Diesel Exhaust Fluid (DEF) is operating whenever the 2,250-kW Standby Emergency Generator is operating.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 010 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The 2,250 kW Standby Emergency Generator 2 (Source ID: 106) is manufactured by Cummins Power Systems, Model No. QSK60-G-1, has a 16-cylinder diesel engine with an electrical power capacity of 3,280 bhp. The unit is used as the primary alternate or backup power source for the facility.

#### # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The 2,250-kW Standby Emergency Generator is manufacured by Cummins Power System, model number QSK60-G1. This generator has an electical output power capacity of 3,280-bhp and is equipped with a Cummins, Selective Catalytic Reduction (SCR) control device, model number CA452. The SCR uses vanadium pentoxide as the oxidation catalyst and uses Diesel Exhaust Fluid (DEF) to reduce NOx emissions.

#### # 012 [25 Pa. Code §129.203]

#### Stationary internal combustion engines.

- (a) The owner or operator of a stationary internal combustion engine rated at greater than 1,000 horsepower and located in Bucks, Chester, Delaware, Montgomery or Philadelphia County shall comply with this section and 25 Pa. Code § 129.204 (relating to emission accountability).
- (b) By October 31 of each year, the owner or operator of the stationary internal combustion engine shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.
- (c) The owner or operator shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth in subparagraph (1).
- (1) For a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour.
- (d) Emissions from a stationary internal combustion engine that has been or is replaced by an electric motor may be counted as allowable emissions for purposes of this section and 25 Pa. Code § 129.204, as follows:
- (1) For a replaced compression ignition stationary internal combustion engine that fired diesel fuel or a combination of diesel fuel and natural gas, 2.3 grams of NOx per brake horsepower-hour, less 1.5 pounds of NOx per MWH of electricity consumed by the replacement motor.

#### # 013 [25 Pa. Code §129.204]

#### Emission accountability.

- (a) The owner or operator of a stationary internal combustion engine shall determine actual emissions in accordance with one of the following:
- (1) If the owner or operator of the unit is required to monitor NOx emissions with a CEMS operated and maintained in accordance with a permit or State or Federal regulation, the CEMS data reported to the Department to comply with the monitoring and reporting requirements of this article shall be used. Any data invalidated under Chapter 139 (relating to



sampling and testing) shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

- (2) If the owner or operator of the unit is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx:
- (i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.
  - (ii) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:
- (A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."
- (B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to date version of EPA's "Factor Information Retrieval (FIRE)" data system.
- (iii) CEMS data, if the owner or operator elects to monitor NOx emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.
- (iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The operator of the unit shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.
- (b) The owner or operator of a unit subject to this section shall surrender to the Department one NOx allowance, as defined in 25 Pa. Code § 145.2 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.
- (d) November 1 of each year, an owner or operator of a unit subject to this section shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:
  - (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (e) If an owner or operator fails to comply with subsection (d), the owner or operator shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.
- (f) The surrender of NOx allowances under subsection (e) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.



- (1) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.
  - (2) Each ton of excess emissions is a separate violation.
- # 014 [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?

The provisions of this subpart are applicable to the owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where the stationary CI ICE was manufactured after April 1, 2006, and are not fire pump engines.

- # 015 [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 permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.
- # 016 [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 Cl internal combustion engine?

The 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 §40 CFR 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.

# 017 [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?

The owners and operators of stationary CI ICE must operate and maintain the stationary CI ICE to achieve the emissions standards required in §40 CFR 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

# 018 [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?

[Additional authority for this permit condition is also derived from §40 CFR 80.510(b)]

- (a) The owners and operators of stationary CI ICE that is subject to this subpart with a displacement of less than 30 liters per cylinder must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- (b) Per §40 CFR 80.510(b), all nonroad and diesel fuel is subject to the following per-gallon standards:
  - (1) Sulfur content: 15 ppm maximum for nonroad diesel fuel.
  - (2) Cetane index or aromatic content:







- (i) A minimum cetane index of 40; or
- (ii) A maximum aromatic content of 35 volume percent.
- # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
  Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
  What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, must install a non-resettable hour meter prior to startup of the engine.

- # 020 [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) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.
- # 021 [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?

The owner or operator of a stationary CI internal combustion engine that is an emergency stationary internal combustion engine is not required to submit an initial notification.







Source ID: 202 Source Name: SOLVENT CLEANING STATIONS

> Source Capacity/Throughput: 30.000 Gal/HR SOLVENT



#### RESTRICTIONS.

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

#### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

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

#### IV. RECORDKEEPING REQUIREMENTS.

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

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 001 [25 Pa. Code §129.63]

#### **Degreasing operations**

- (a) Except for those subject to the federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) for halogenated solvent cleaners under §40 CFR 63, this subsection applies to cold cleaning machines that use two (2) gallons or more of solvents containing greater than 5% VOC content by weight for the cleaning of metal parts.
  - (1) Immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater.
  - (2) Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:
- (i) Have a permanent, conspicuous label summarizing the operating requirements in paragraph (3). In addition, the label shall include the following discretionary good operating practices:
- (A) Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine.
- (B) When a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned.
  - (C) Work area fans should be located and positioned so that they do not blow across the opening of the degreaser





unit.

- (ii) Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than 6 inches shall constitute an acceptable cover.
  - (3) Cold cleaning machines shall be operated in accordance with the following procedures:
- (i) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.
- (ii) Flushing of parts using a flexible hose or other flushing device shall be performed only within the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray.
- (iii) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine.
  - (iv) Air agitated solvent baths may not be used.
  - (v) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.
- (4) A person may not use, sell or offer for sale for use in a cold cleaning machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.
- (5) A person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:
  - (i) The name and address of the solvent supplier.
  - (ii) The type of solvent including the product or vendor identification number.
  - (iii) he vapor pressure of the solvent measured in mm hg at 20°C (68°F).
- (6) A person who operates a cold cleaning machine shall maintain for at least two (2) years and shall provide to the Department, on request, the information specified in paragraph (5). An invoice, bill of sale, certificate that corresponds to a number of sales, Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this section.
  - (7) Paragraph (4) does not apply:
    - (i) To cold cleaning machines used in extreme cleaning service.
- (ii) If the owner or operator of the cold cleaning machine demonstrates, and the Department approves in writing, that compliance with paragraph (4) will result in unsafe operating conditions.
  - (iii) To immersion cold cleaning machines with a freeboard ratio equal to or greater than 0.75.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Solvent Cleaning Stations (Source ID: 202) consists of the following:

(a) Maintenance Shop consisitng of two (2) cleaning stations with the following:







- (1) One (1) 16-gallon station
- (2) One (1) 7.27-gallon station
- (3) One (1) 30-gallon drum
- (b) Boiler Room consisting of one (1) cleaning station with the following:
  - (1) One (1) 26-gallon station
  - (2) One (1) 30-gallon drum
- (c) Main Fountain Garden Pump House consisting of one (1) cleaning station with the following:
  - (1) One (1) 30-gallon drum





# **SECTION E.** Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.







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

Source Id	Source Description
O G G I G	Course Bootinpaid

031 BOILER 1 (B21 A-K1)

<b>Emission Limit</b>			Pollutant
1.200	Lbs/MMBTU		SOX
0.400	Lbs/MMBTU	particulate matter	TSP

032 BOILER 2 (B21 A-K2)

<b>Emission Limit</b>			Pollutant
1.200	Lbs/MMBTU		SOX
0.400	Lbs/MMBTU	particulate matter	TSP

033 BOILER 3 (B21 A-K3)

<b>Emission Limit</b>			Pollutant
1.200	Lbs/MMBTU		SOX
0.400	Lbs/MMBTU	particulate matter	TSP

101 800 KW EMERGENCY GENERATOR 1 (B47-G1)

<b>Emission Limit</b>			Pollutant
3.200	Tons/Yr	combined total for Source ID: 101 & 102	CO
6.380	Lbs/Hr		CO
12.020	Tons/Yr	combined total for Source ID: 101 & 102	NOX
24.030	Lbs/Hr		NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3	particulate matter	TSP

102 800 KW EMERGENCY GENERATOR 2 (B47-G2)

<b>Emission Limit</b>			Pollutant
3.200	Tons/Yr	combined total Source ID: 101 & 102	CO
6.380	Lbs/Hr	Source ID: 102	CO
12.020	Tons/Yr	combined total Source ID: 101 & 102	NOX
24.030	Lbs/Hr	Source ID: 102	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3	particulate matter	TSP

103A 200 KW EMERGENCY GENERATOR (B21-G1)

<b>Emission Limit</b>			Pollutant
2.750	Tons/OZNESEAS	total, exempted ICE	NOX
6.600	Tons/Yr	12-month rolling sum	NOX
100.000	Lbs/Hr	total, exempted ICE	NOX
1,000.000	Lbs/Day	total, exempted ICE	NOX
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3	particulate matter	TSP

104A 200 KW EMERGENCY GENERATOR (B60-IT)

Emission Limit			Pollutant
2.750	Tons/OZNESEAS	total, exempted ICE	NOX
6.600	Tons/Yr	12-month rolling sum	NOX







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

Source Id	Source Descripti	or		
400.000	1 - 11-	4-4-1 4 105	NOV	
100.000		total, exempted ICE	NOX	
1,000.000	Lbs/Day	total, exempted ICE	NOX	
500.000	PPMV	dry basis	SOX	
0.040	gr/DRY FT3	particulate matter	TSP	

# 105 2,250 KW STANDBY EMERGENCY GENERATOR 1 (B067-G1)

<b>Emission Limit</b>			Pollutant
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3	particulate matter	TSP

# 106 2,250 KW STANDBY EMERGENCY GENERATOR 2 (B067-G2)

<b>Emission Limit</b>			Pollutant
500.000	PPMV	drybasis	SOX
0.040	gr/DRY FT3	particulate matter	TSP

# **Site Emission Restriction Summary**

Emission Limit		Pollutant	
24.900 Tons/Yr	12-month rolling sum	NOX	







#### SECTION G. Miscellaneous.

- (a) The following previously plan approvals, operating permits and Request For Determinations (RFD) serve as the basis for certain terms and conditions in this State Only Operating Permit No. 15-00095:
- (1) RFD No. 1013 (2-200 kW Emergency Generators)
- (2) Plan Approval No. PA-15-0095B (2-800 kW Emergency Generators)
- (3) GPA/GOP GP9-15-0028 (2-2,250 kW Diesel Fuel-Fired Internal Combustion Engines)
- (b) The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C of this permit, do not require limitations, monitoring, or recordkeeping:

Group 001 - Natural Gas Fired External Combustion Units (Rated Cap.<3 MMBtu/hr)

- (1) 2.1 MMBtu/hr natural gas boiler Pierce DuPont house and garage
- (2) 2.2 MMBtu/hr natural gas boiler Visitor's Center
- (3) 2-2.207 MMBtu/hr natural gas boilers Greenhouse #36
- (4) 2.597 MMBtu/hr natural gas boiler Maintenance Shop (Rt. 926)
- (5) 0.72 MMBtu/hr natural gas boiler Maintenance Shop (Rt. 926)
- (6) 1.155 MMBtu/hr natural gas boiler Open Air Theatre Dressing Room
- (7) 0.35 MMBtu/hr propane boiler Webb Barn (Rte. 1 & 52)
- (8) 0.4 MMBtu/hr natural gas boiler Nursery (Rte. 1 & 52)
- (9) 2-0.15 MMBtu/hr natural gas boiler Nursery (Rte. 1 & 52)
- (10) 1.589 MMBtu/hr natural gas boiler Dorm Corner (Rte. 1 & 52)
- (11) 0.8 MMBtu/hr natural gas boiler Restaurant cooking
- (12) 0.1 MMBtu/hr natural gas boiler Vegetable Garden
- (13) 10-0.491 MMBtu/hr natural gas boilers Red Lion Dormitories
- (14) 8-0.17 MMBtu/hr natural gas heaters Nursery Greenhouses
- (15) 4 -0.2 MMBtu/hr natural gas heaters Nursery Greenhouses
- (16) 0.305 MMBtu/hr natural gas heaters Open Air Theatre
- (17) 0.05 MMBtu/hr natural gas hot water heater Open Air Theatre
- (18) 2 -0.05 MMBtu/hr natural gas heaters Fountain Gardens
- (19) 0.175 MMBtu/hr natural gas heaters Fountain Gardens
- (20) 0.3 MMBtu/hr natural gas heaters Fountain Gardens
- (21) Various natural gas boilers and hot water heaters Tenant Houses (Total MMBtu/hr = 6.88 MMBtu/hr)
- (22) 0.3 MMBtu/hr natural gas hot water heater Restaurant
- (23) 0.6 MMBtu/hr natural gas hot water heater Restaurant
- (24) 0.5 MMBtu/hr natural gas hot water heater Restaurant
- (25) 0.2 MMBtu/hr natural gas boiler Tourist Center

Group 002 - No. 2 Oil Fired External Combustion Units (Rated Cap.<10 MMBtu/hr)

- (1) 4.184 MMBtu/hr Auxiliary Port Boiler
- (2) 3.8 gal/hr No. 2 oil burner Anvil Shop (Rte. 1 & 52)
- (3) 2-10,500 Btu/hr No. 2 oil burners Red Lion Dormitories
- (4) 0.105 MMBtu/hr No. 2 oil burner Sewage Treatment Plant
- (5) 0.42 MMBtu/hr No. 2 oil burner AABGA office
- (6) Various No. 2 oil burners and hot water heaters Tenant House (Total MMBtu/hr = 0.43 MMBtu/hr)

Group 003 - Propane Fired External Combustion Units (Rated Cap.<2.5 MMBtu/hr)

- (1) 6-0.15 MMBtu/hr propane heaters Nursery Greenhouses
- (2) 0.125 MMBtu/hr propane heater Sewage Treatment Plant office
- (3) 0.033 MMBtu/hr hot water heater Tenant House

Group 004 - Fuel Storage Tanks

- (1) 2-150,000 gallon concrete AST used to store No. 6 fuel
- (2) 1,500 gallon AST used to preheat No. 6 fuel prior to feeding to boilers



#### SECTION G. Miscellaneous.

- (3) 2-275 gallon AST used to store Diesel Fuel for the 2-stage generator
- (4) 1,000 gallon AST used to store No. 2 fuel oil for the auxiliary port boiler
- (5) 6,000 gallon AST used to store Diesel Fuel for the generators
- (6) 1,000 gallon AST used to store propane
- (7) 500 gallon AST used to store Diesel fuel (Maintenance Bldg. on Rte. 926)
- (8) 3,000 gallon AST used to store gasoline (Maintenance Bldg. on Rte. 926)
- (9) 2-1,000 gallon AST used to store propane for the boiler that heats the Webb Barn
- (10) 2,000 gallon AST used to store gasoline (Webb barn)
- (11) 2,000 gallon AST used to store diesel fuel (Webb barn)
- (12) 275 gallon AST used to store gasoline (Nursery)
- (13) 150 gallon AST used to store Diesel Fuel (Nursery on Rte. 1 & 52)
- (14) 275 gallon AST used to store Diesel Fuel (Nursery);
- (15) 275 gallon AST used to store Diesel Fuel (Anvil Bldg.)
- (16) 275 gallon AST used to store Kersone (Anvil Bldg.)
- (17) 2,000 gallon UST used to store No. 2 fuel oil for the boiler (Anvil Bldg.)
- (18) 275 gallon AST used to store Diesel Fuel (Abbondi area)
- (19) 500 gallon AST used to store Diesel Fuel (Horticulture area)
- (20) 1000 gallon AST used to store gasoline (Horticulture area)
- (21) 2-250 gallon AST used to store propane for boiler (Vegetable Garden Bldg.)
- (22) 3-1,000 gallon UST used to store propane (Red Lion Dormitories)
- (23) 275 gallon AST used to store No. 2 fuel oil (Sewage Treatment Plant)
- (24) 1,100 gallon UST used to store No. 2 fuel oil (AABGA office)
- (25) 3-1,000 gallon UST used to store No. 2 fuel oil (Tenant Houses)

#### Other Insignificant Sources

- (1) Spray Paint Booth (Bldg. 51) (RFD 15-A01-888)
- (2) Wood burning stove (vegetable garden)
- (3) 2 shot blast cabinets for metal parts cleaning
- (4) Facility-wide gasoline dispensing operations
- (5) Facility-wide diesel fuel and kerosene dispensing operations
- (c) The State-Only Operating Permit No. 15-00095 incorporates regulatory conditions from the following:
- (1) Plan Approval PA-15-0095B (2-800 kW Diesel-Fired Emergency Generators)
- (d) The State-Only Operating Permit No. 15-00095 (APS ID: 345471, Auth ID: 706538) has been renewed.
- (e) The State-Only Operating Permit No. 15-00095 (APS ID: 345471, Auth ID: 955292) has been renewed.
- (f) The State-Only Operating Permit No. 15-00095 (APS ID: 345471, Auth ID: 1213738) has been renewed.
- (e) The State-Only Operating Permit No. 15-00095 (APS ID: 345471, Auth ID: 1213738) has been renewed.





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