



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM**

**STATE ONLY SYNTHETIC MINOR OPERATING PERMIT**

Issue Date:	May 12, 2021	Effective Date:	May 28, 2024
Revision Date:	May 28, 2024	Expiration Date:	June 7, 2026
Revision Type:	Amendment		

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

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

**State Only Permit No: 23-00030**

Synthetic Minor

Federal Tax Id - Plant Code: 23-1352683-1

**Owner Information**

Name: SWARTHMORE COLL  
Mailing Address: 500 COLLEGE AVE  
SWARTHMORE, PA 19081-1306

**Plant Information**

Plant: SWARTHMORE COLLEGE/SWARTHMORE  
Location: 23 Delaware County 23831 Swarthmore Borough  
SIC Code: 8221 Services - Colleges And Universities

**Responsible Official**

Name: ANDREW FEICK  
Title: ASSOC. V.P. - FACILITIES  
Phone: (610) 328 - 8276 Email: afeick1@swarthmore.edu

**Permit Contact Person**

Name: JIM ADAMS  
Title: DIR OF MAINTENANCE  
Phone: (610) 328 - 8278 Email: jadams3@swarthmore.edu

[Signature] \_\_\_\_\_  
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



## SECTION A. Table of Contents

### Section A. Facility/Source Identification

Table of Contents  
Site Inventory List

### Section B. General State Only Requirements

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

### Section C. Site Level State Only Requirements

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

### Section D. Source Level State Only Requirements

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

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

### Section E. Source Group Restrictions

- E-I: Restrictions



## SECTION A. Table of Contents

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

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

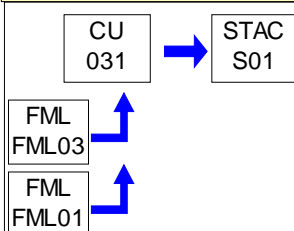
- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements
- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

### Section G. Emission Restriction Summary

### Section H. Miscellaneous

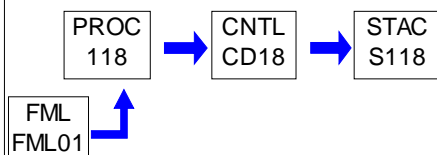
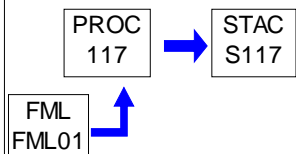
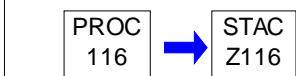
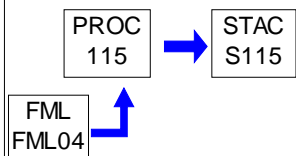
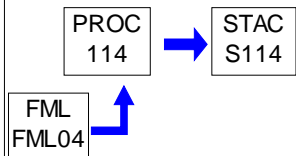
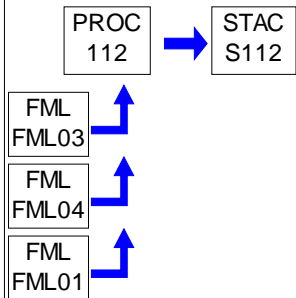
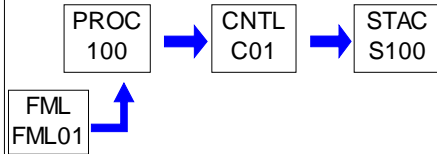
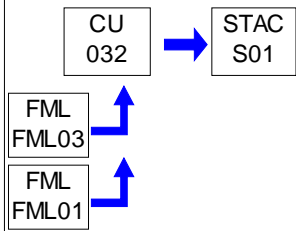
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
017	SMALL MISC. BOILERS		
031	HEAT PLANT BOILER 1A	29.290 MMBTU/HR	
		209.000 Gal/HR	#2 Oil
		29,291.000 CF/HR	Natural Gas
032	HEAT PLANT BOILER 1B	29.290 MMBTU/HR	
		29,291.000 CF/HR	Natural Gas
		209.000 Gal/HR	#2 Oil
100	YORK CHILLING UNIT SI ENGINE	3,420.000 CF/HR	Natural Gas
112	RACT EMERGENCY GENERATORS	N/A	Diesel Fuel
		N/A	Natural Gas
114	EXEMPT COMPRESSION IGNITION ENGINES	N/A	Diesel Fuel
115	EXEMPT ENGINES (PRE-2006)	N/A	Diesel Fuel
116	REMOTE RESERVOIR PARTS WASHER		
117	EXEMPT SPARK IGNITION ENGINES	N/A	Natural Gas
118	2.5 MW NG CATERPILLAR ENGINE 1	23.280 MMBTU/HR	
		25,740.000 CF/HR	Natural Gas
119	2.5 MW NG CATERPILLAR ENGINE 2	23.280 MMBTU/HR	
		25,740.000 CF/HR	Natural Gas
C01	YORK CHILLER CATALYTIC CONVERTER		
CD18	OXIDATION CATALYST ENGINE 118		
CD19	OXIDATION CATALYST ENGINE 119		
FML01	NATURAL GAS LINE		
FML03	NO. 2 FUEL OIL		
FML04	DIESEL FUEL OIL		
S01	HEAT PLANT STACK		
S100	YORK CHILLER STACK		
S112	EXISTING RACT ENGINES STACKS		
S114	DIESEL EMERGENCY GENERATOR STACK		
S115	EXISTING EXEMPT ENGINE STACKS		
S117	NATURAL GAS EMERGENCY ENGINE STACK		
S118	ENGINE 118 STACK		
S119	ENGINE 119 STACK		
Z116	REMOTE RESERVOIR PARTS WASHER FUGITIVES		

**PERMIT MAPS**

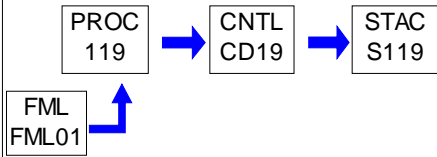


## PERMIT MAPS





**PERMIT MAPS**



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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> 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 PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

**SECTION B. General State Only Requirements**

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

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

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

(1) Section 127.14 (relating to exemptions)

(2) Section 127.447 (relating to alternative operating scenarios)

(3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)

(4) Section 127.449 (relating to de minimis emission increases)

(5) Section 127.450 (relating to administrative operating permit amendments)

**SECTION B. General State Only Requirements**

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

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

**#015 [25 Pa. Code § 127.11]****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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

No person may permit air pollution as that term is defined in Section 3 of the Air Pollution Control Act (35 P.S. § 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) Sources and classes of sources other than those identified in (a) - (f) above, for which the operator has obtained a determination from the Department, in accordance with 25 Pa. Code § 123.1 (b), 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 25 Pa. Code § 123.1 (a)(1)-(9), 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.
- (b) Equal to or greater than 60% at any time.

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

The opacity limitations 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.

**SECTION C. Site Level Requirements**

(c) When the emission results from sources specified in 25 Pa. Code § 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).

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

The permittee shall limit facility-wide potential to emit NOx emissions to less than 25 tons per year, based on a 12-month rolling sum.

[This permit condition streamlines compliance with the NOx emission limits applicable to the Heat Plant Boilers 1A and 1B (Source ID 031 and Source ID 032).]

[The facility-wide NOx emission limit applies to all sources listed in the permit, including insignificant sources which are exempt from plan approval requirements which may be listed in Miscellaneous Section of the permit.]

**# 008 [25 Pa. Code §129.14]****Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except when 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) A 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 solely for recreational or ceremonial purposes.
- (e) A fire set solely for cooking food.

**II. TESTING REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) If at any time the Department has cause to believe that air contaminant emissions from any source 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 are 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 and the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, 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.

**III. MONITORING REQUIREMENTS.****# 010 [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.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(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).



**SECTION C. Site Level Requirements**

- (3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2).
- (b) All detectable emissions, and/or objectionable odors, that originated on-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) At the end of six months, upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.
- (d) At the end of the second six month period, 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 and the semi-annual report of monitoring and record keeping, complaints, monitoring results, and/or Department findings.

**IV. RECORDKEEPING REQUIREMENTS.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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.
- (c) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.

**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record all parameters necessary to determine the emission of nitrogen oxides (NO<sub>x</sub>) from each source listed in the permit, including insignificant sources listed in the Miscellaneous Section of the permit.

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

The permittee shall maintain monthly records of facility-wide NO<sub>x</sub> emissions, including 12-month rolling sums. Facility-wide emissions include emissions from sources listed in Section A of the permit and insignificant sources listed in the Miscellaneous Section of the permit.

**# 015 [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) De minimis increases 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.

**V. REPORTING REQUIREMENTS.****# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this 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

**SECTION C. Site Level Requirements**

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 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 USEPA 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 USEPA 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.

**# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

**SECTION C. Site Level Requirements**

(c) The report shall describe the following:

- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

**VI. WORK PRACTICE REQUIREMENTS.****# 018 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified in 25 Pa. Code § 123.1 (a)(1)-(9) 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 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.

**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall ensure that all sources and any associated air cleaning devices are operated and maintained in a manner consistent with good operating practices.

**# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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.

**# 021 [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 air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations,

**SECTION C. Site Level Requirements**

if at any time the operation of the source(s) identified in Section A of this operating 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.

**VII. ADDITIONAL REQUIREMENTS.**

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

**VIII. COMPLIANCE CERTIFICATION.**

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

**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.

**SECTION D. Source Level Requirements**

Source ID: 017

Source Name: SMALL MISC. BOILERS

Source Capacity/Throughput:

**I. RESTRICTIONS.****Throughput Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the aggregate natural gas usage for all small boilers listed in this Source ID to 90 MMSCF per year, based on a 12-month rolling sum.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain monthly and 12-month rolling sums of the aggregate amount of natural gas usage for all small boilers listed in this Source ID.

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

This Source ID includes the following small boilers fired by natural gas:

North Chiller Plant - Aerco Boilers (3 units each rated at 6.0 MMBtu/hr)

Hormel-Nguyen IC - Aerco Boiler

101 South Chester Road - Aerco Boilers (2 units each rated at 0.75 MMBtu/hr)

Wisler Hall Boiler 1 (0.285 MMBtu/hr)

Wisler Hall Boiler 2 (0.385 MMBtu/hr)

Ashton House (0.494 MMBTU/hr)

BCC Hall (2 units each rated at 0.140 MMBTU/hr)

Mary Lyon 1 (0.649 MMBTU/hr)

Mary Lyon 4 (1.860 MMBTU/hr)

Mertz Dormitory (2 units each rated at 1.273 MMBTU/hr)

Palmer/Pitt (3 units, each rated at 0.399 MMBTU/hr)

Roberts (1.077 MMBTU/hr)

**SECTION D. Source Level Requirements**

Ware Pool (4 units each rated at 0.375 MMBTU/hr)  
404 Elm (2 units each rated at 0.199 MMBTU/hr)  
Peerless Hot Water Boiler (Sharples I and II): 0.34 MMBTU/hr  
Carrier Hot Air Furnace (Sharples III): 0.08 MMBTU/Hr  
Peerless Hot Water Boiler (Sharples IV): 0.228 MMBTU/hr  
Martin (2 units each rated at 0.183 MMBTU/hr)  
Tennis Pavilion Carrier Roof-Pack (0.525 MMBTU/hr - Natural Gas)  
Mary Lyon 4 #2 (0.140 MMBTU/hr - Natural Gas)  
#1 Whittier (0.140 MMBTU/hr - Natural Gas)  
(2) 100,000 Btu/hr natural gas Aerco Boilers and (2) 199,000 Btu/hr natural gas Hot Water Heaters located in the multipurpose fitness center at Field House Lane (Matchbox Building)  
(2) 1.0 MM Btu/hr natural gas Aerco Boilers and (2) 750,000 natural gas Hot Water Heaters located at Willets Hall  
(2) 2.0 MMBtu/hr natural gas Aerco Boilers and (1) 1.35 Hot Water Heater located at Dana/Hallowell Hall  
Wharton Hall (2 units each rated at 1.0 MMBtu/hr)  
Woolman Hall Boiler 1 (1.0 MMBtu/hr)  
Science Center (2 units each rated at 0.4 MMBtu/hr)

**SECTION D. Source Level Requirements**

Source ID: 031

Source Name: HEAT PLANT BOILER 1A

Source Capacity/Throughput:	29.290	MMBTU/HR	
	209.000	Gal/HR	#2 Oil
	29,291.000	CF/HR	Natural Gas

Conditions for this source occur in the following groups: GROUP 1  
GROUP 2

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION D. Source Level Requirements**

Source ID: 032

Source Name: HEAT PLANT BOILER 1B

Source Capacity/Throughput: 29.290 MMBTU/HR

29,291.000 CF/HR

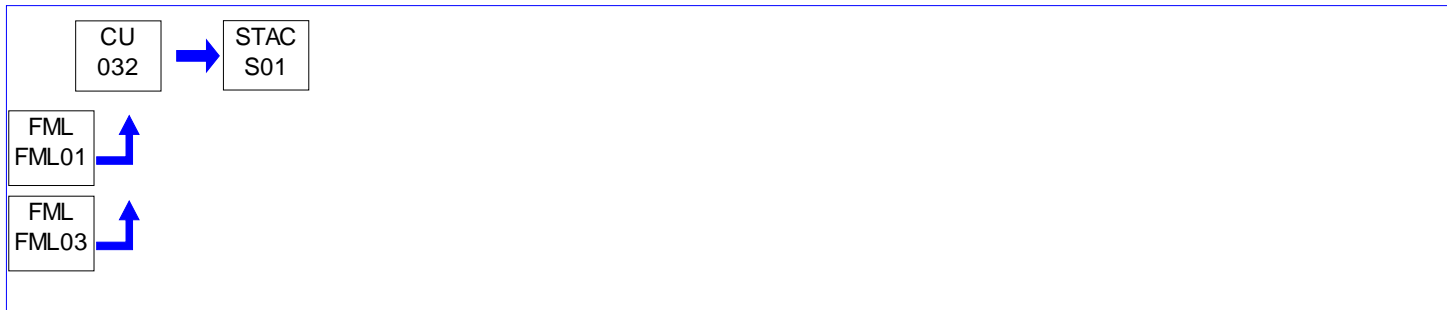
Natural Gas

209.000 Gal/HR

#2 Oil

Conditions for this source occur in the following groups: GROUP 1

GROUP 2

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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



**SECTION D. Source Level Requirements**

Source ID: 100

Source Name: YORK CHILLING UNIT SI ENGINE

Source Capacity/Throughput: 3,420.000 CF/HR Natural Gas

Conditions for this source occur in the following groups: GROUP 3

**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 natural gas fired engine (Source 100) at any time, in a manner that the concentration of particulate matter in the effluent gas exceeds of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

[Compliance with the particulate matter emission limit is demonstrated through the use of natural gas as approved herein.]

**# 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 SO<sub>2</sub>, in the effluent gas exceeds 500 ppmvd.

[Compliance with the sulfur oxide emission limit is demonstrated through the use of natural gas as approved herein.]

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

The permittee shall limit the NO<sub>x</sub> emissions from the natural gas driven engine (Source 100) to 1.0 gm/bhp-hr.

**Fuel Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall use only natural gas in the engine powering the York Chilling Unit.

**Operation Hours Restriction(s).****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the hours of operation for the natural gas driven engine to 3,800 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 permittee shall limit the engine's natural gas usage 13 million cubic feet of natural gas usage per year, based on a 12-month rolling sum.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a source test on this natural gas chilling unit once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. In accordance with 25 Pa. Code § 139.11(1), performance tests shall be performed while the source is operating at maximum routine operating conditions or under other such conditions within the capacity of the equipment as may be requested by the Department. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(b) The stack test shall be conducted to determine, at a minimum, NO<sub>x</sub> emissions from the natural gas chilling unit. Performance tests shall be conducted in accordance with the provisions of EPA Test Methods or other Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

(c) At least ninety (90) calendar 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.

(d) At least thirty (30) calendar days prior to the test(s), the Department shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test, an electronic copy 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.

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

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

Southeast Region  
RA-EPSEstacktesting@pa.gov

Central Office  
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

(1) Test Date(s)

- (a) For protocols, provide the proposed date on which testing will commence or "TBD"
- (b) For reports, provide the first and last day of testing

(2) Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

(3) Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

(4) Operating Permit Number and Testing Condition Reference.

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential

**SECTION D. Source Level Requirements**

copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL."

**III. MONITORING REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following operating parameters for the natural gas driven engine on a monthly basis (Source 100):

- (a) NO<sub>x</sub> emissions, in lb/hr based on the emission factor from the most recent source test and the hours of operation and amount of fuel used,
- (b) Hours of operation, and
- (c) Amount of fuel used.

**IV. RECORDKEEPING REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of the following operating parameters for the natural gas driven engine (Source 100):

- (a) NO<sub>x</sub> emissions, in lb/hr units, on a monthly basis,
- (b) Hours of operation on a monthly basis and 12-month rolling, and
- (c) Amount of fuel used on a monthly and 12-month rolling basis.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall record all maintenance and repair work performed on the engine and the catalytic converter in a bound logbook to include:

- (a) type of maintenance or repair,
- (b) date and time of maintenance or repair, and
- (c) operator's name.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee maintain and operate the liquid chilling unit, the natural gas driven engine, and the associated control device (C01 Catalytic Converter) in accordance with the manufacturer's specifications

**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain and operate an hourly totalizer to track operating hours, and a fuel meter to track the fuel usage on the natural gas driven engine (Source 100).

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

The York Chilling Unit natural gas engine (Source 100) manufactured by Caterpillar, Inc., Model No. 3408 has a rated



**SECTION D. Source Level Requirements**

capacity of 450 brake-horsepower (bhp).

**SECTION D. Source Level Requirements**

Source ID: 112

Source Name: RACT EMERGENCY GENERATORS

Source Capacity/Throughput:

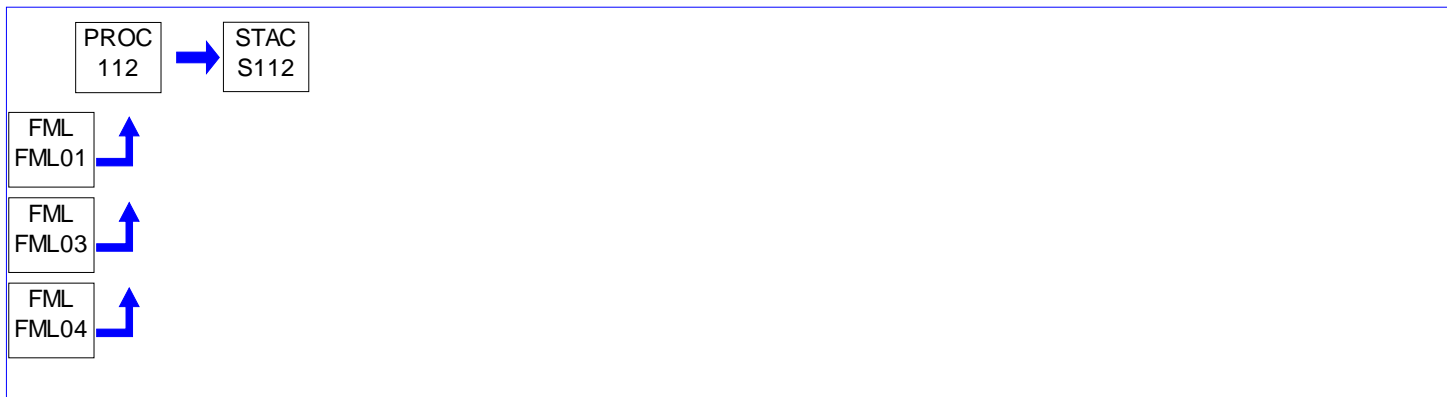
N/A

Diesel Fuel

N/A

Natural Gas

Conditions for this source occur in the following groups: GROUP 3  
GROUP 5

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

No person may permit the emission into the outdoor atmosphere of particulate matter from a process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

[Compliance with the particulate matter emission limit is demonstrated through the use of proper fuels as approved herein.]

**# 002 [25 Pa. Code §123.21]****General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides in a manner that the concentration of sulfur oxides (SOx), expressed as sulfur dioxides (SO<sub>2</sub>), in the effluent gas exceeds 500 parts per million, by volume, dry basis.

[Compliance with this regulation may be demonstrated through the use of natural gas, or by using commercial grade fuel oil containing a sulfur content of 0.2% or less by weight.]

**II. TESTING REQUIREMENTS.****# 003 [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 a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F.

(3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

**SECTION D. Source Level Requirements**

(4) 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 subpart (a) above, shall be waived in the event that a delivery receipt from the supplier, showing the percentage sulfur in the fuel, is obtained each time a fuel oil delivery is made.

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

**# 004 [25 Pa. Code §129.93]**

**Presumptive RACT emission limitations**

The permittee shall maintain and operate each emergency generator listed in Source ID 112 in accordance with manufacturer's specifications and good air pollution control practices.

**VII. ADDITIONAL REQUIREMENTS.**

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Source ID 112 includes the following existing emergency generators as previously listed in the RACT Operating Permit No. 23-0030:

- (1) Heat Plant KatoLight Generator (365 kW - No. 2 fuel oil)
- (2) Field House (30 kW - Diesel)
- (3) Clothier Hall (25 kW - Diesel)
- (4) Wharton (20 kW - Diesel)
- (5) Mertz (15 kW - Natural Gas)
- (6) Worth (15 kW - Natural Gas)
- (7) Palmer Hall (200 kW - Natural Gas)
- (8) Martin Hall (80 kW - Diesel).

**SECTION D. Source Level Requirements**

Source ID: 114

Source Name: EXEMPT COMPRESSION IGNITION ENGINES

Source Capacity/Throughput:

N/A

Diesel Fuel

Conditions for this source occur in the following groups: GROUP 3  
GROUP 5

**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 a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

[Compliance with this emission limit is demonstrated through the use of proper fuel as allowed herein.]

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the aggregate NOx emissions from all exempt engines on site (Source ID 114, 115, and 117) to less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis.

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

**(a) Tier 3 Engine:**

The permittee shall comply with the emission standards for all pollutants as required in 40 CFR § 60.4202(a)(2) and Table 1 of 40 CFR § 89.112(a), according to 40 CFR § 60.4205(b), as follows:

NMHC + NOx less than 4.0 g/kW-hr

CO less than 3.5 g/kW-hr

PM less than 0.20 g/kW-hr

**(b) Tier 2 Engine:**

The permittee shall comply with the emission standards for all pollutants as required in 40 CFR § 60.4202(a)(2) and Table 1 of 40 CFR § 89.112(a), according to 40 CFR § 60.4205(b), as follows:

NMHC + NOx less than 6.4 g/kW-hr

CO less than 3.5 g/kW-hr

PM less than 0.20 g/kW-hr

[Compliance with the emission standards of 40 CFR Part 60 Subpart IIII and Table 1 of 40 CFR § 89.112 is demonstrated through manufacturer specification sheets containing emission data and/or the engine certification for emissions (i.e. Tier 3, Tier 2) for each new compression ignition engine.]

**SECTION D. Source Level Requirements****Fuel Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 60.4207(b) and 80.510(c).]

The permittee shall ensure that diesel fuel is the only fuel consumed by this engine. The diesel fuel is subject to the following per-gallon standards:

- (a) Sulfur content: 15 ppm maximum for nonroad diesel fuel.
- (b) Cetane index or aromatic content, as follows:

- (1) A minimum cetane index of 40; or
- (2) A maximum aromatic content of 35 volume percent.

[Compliance with this streamlined condition assures compliance with 25 Pa. Code § 123.21(b).]

**Operation Hours Restriction(s).****# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart III - 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

(a) In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described as follows, is prohibited, according to 40 CFR § 60.4211(f)(1) through (3):

(1) The permittee may operate the emergency stationary ICE for any combination of the purposes of maintenance checks and readiness testing for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (b) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (a). Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(b) If the permittee does not operate the engine according to the requirements of this condition, the engine will not be considered an emergency engine under 40 CFR Part 60 Subpart III and the engine must meet all requirements for nonemergency engines.

**II. TESTING REQUIREMENTS.****# 006 [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 a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F.

(3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).



**SECTION D. Source Level Requirements**

(4) 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 subpart (a) above, shall be waived in the event that a delivery receipt from the supplier, showing the percentage sulfur in the fuel, is obtained each time a fuel oil delivery is made.

**III. MONITORING REQUIREMENTS.**

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall calculate NOx emissions for this source in lbs/hr, lbs/day, tons per ozone season, and tons per year, using manufacturer data or AP-42 NOx emission factors for uncontrolled diesel industrial engines (Table 3.3-1) and the engine hours of operation.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]**

**Subpart III - 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?**

[Additional authority for this permit condition is also derived from 40 CFR § 60.4209(a).]

The permittee shall monitor the hours of operation of the engine through the use of a non-resettable hour meter.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 009 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain monthly records of the aggregate NOx emissions from all exempt engines on site including pounds per hour, pounds per day, ozone season (i.e., the period from May 1 through September 30 of each year) sums, and 12-month rolling sums to demonstrate compliance with the NOx emission limits applicable to this source.

**# 010 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain records of the following information, for each shipment of diesel fuel received for this engine, obtained either by laboratory analysis or from the fuel supplier's certification:

(a) The sulfur content.

(b) The cetane index or the aromatic content.

**# 011 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall keep records on site to demonstrate compliance that this engine is certified (i.e. certificate of conformity or USEPA or EU equivalent Tier certification, etc.) and in compliance with the emission standards as required by 40 CFR § Part 60 Subpart III.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]**

**Subpart III - 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall keep records of the operation of this engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

**V. REPORTING REQUIREMENTS.**

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR § 60.4209(a).]

The permittee shall maintain and operate a non-resettable hour meter on this emergency stationary internal combustion engine.

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]****Subpart III - 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall operate and maintain this stationary CI ICE which achieves the emission standards as required in 40 CFR Part 60 Subpart III over the entire life of the engine.

**# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart III - 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

(a) The permittee shall operate and maintain this stationary CI internal combustion engine according to the manufacturer's emission-related written instructions.

(b) The permittee shall change only those emission-related settings that are permitted by the manufacturer.

**# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart III - 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall comply with the applicable emission limits of 40 CFR Part 60 Subpart III by purchasing an engine certified to the emission standards, as applicable, for the same model year and maximum engine power, according to 40 CFR § 60.4211(c).

**# 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart III - 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

If the permittee does not operate and maintain this engine according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows, according to 40 CFR § 60.4211(g)(2) and (3):

(a) For each stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the emission related settings are changed in a way that is not permitted by the manufacturer.

(b) For each stationary CI internal combustion engine greater than 500 HP, the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1

**SECTION D. Source Level Requirements**

year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

**VII. ADDITIONAL REQUIREMENTS.****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This engine is subject to the requirements of Subpart IIII of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the EPA and the Department. NSPS reports may be submitted electronically to EPA's Central Data Exchange: <https://cdx.epa.gov/>

**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Source ID 114 includes the following diesel emergency generators:

- (1) MTU Onsite Diesel Emergency Generator is powered by a John Deere engine rated at 158 kw and 118 hp. John Deere Engine Model No. 4045HF285 Diesel Engine, CARB and USEPA Tier 3 certified. The free standing unit is located outside the Dana/Hallowell Building.
- (2) MTU Onsite Diesel Emergency Generator Set Model No. 12V1600 DS600 rated at 600 kW; USEPA Tier 2 MTU Engine Model No. 12V1600G80S, located at Singer Hall.

**SECTION D. Source Level Requirements**

Source ID: 115

Source Name: EXEMPT ENGINES (PRE-2006)

Source Capacity/Throughput:

N/A

Diesel Fuel

Conditions for this source occur in the following groups: GROUP 3  
GROUP 5

**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 a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

[Compliance with this emission limit is demonstrated through the use of proper fuels as allowed herein.]

**# 002 [25 Pa. Code §123.21]****General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides in a manner that the concentration of sulfur oxides (SOx), expressed as sulfur dioxides (SO<sub>2</sub>), in the effluent gas exceeds 500 parts per million, by volume, dry basis.

[Compliance with this regulation may be demonstrated through the use of commercial grade fuel oil containing a sulfur content of 0.2% or less by weight.]

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

The permittee shall limit the aggregate NO<sub>x</sub> emissions from all exempt engines on site (Source ID 114, 115, and 117) to less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis.

**II. TESTING REQUIREMENTS.****# 004 [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 a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F.

(3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

**SECTION D. Source Level Requirements**

(b) The testing requirements in subpart (a) above, shall be waived in the event that a delivery receipt from the supplier, showing the percentage sulfur in the fuel, is obtained each time a fuel oil delivery is made.

**III. MONITORING REQUIREMENTS.**

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall calculate NOx emissions for this source in lbs/hr, lbs/day, tons per ozone season, and tons per year, using manufacturer data or AP-42 NOx emission factors for uncontrolled diesel industrial engines (Table 3.3-1) and the engine hours of operation.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain monthly records of the aggregate NOx emissions from all exempt engines on site including pounds per hour, pounds per day, ozone season (i.e., the period from May 1 through September 30 of each year) sums, and 12-month rolling sums to demonstrate compliance with the NOx emission limits applicable to this source.

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain records of the sulfur content for each shipment of diesel fuel received for this engine, obtained either by laboratory analysis or from the fuel supplier's certification.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Source ID 115 includes the following existing exempt engines:

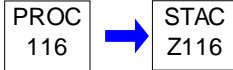
- (1) RFD No. 23-A01-801: 200 kW Diesel Emergency Generator Lang Performance Arts
- (2) RFD No. 23-A01-794: 200 kW Diesel Emergency Generator Dupont (Science Center)
- (3) RFD No. 23-A01-800: 200 kW Diesel Fire Pump Parrish Hall
- (4) 100 kW Diesel Emergency Generator McCabe Library.

**SECTION D. Source Level Requirements**

Source ID: 116

Source Name: REMOTE RESERVOIR PARTS WASHER

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.****# 001 [25 Pa. Code §129.63]****Degreasing operations**

The permittee shall perform the following recordkeeping for the parts washers:

(a) The permittee shall maintain records and provide to the Department, on request, the information specified below, pursuant to 25 Pa. Code § 129.63(a)(6):

- (1) The name and address of the solvent supplier.
- (2) The type of solvent including the product or vendor identification number.
- (3) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

(b) An invoice, bill of sale, certificate that corresponds to a number of sales, Safety Data Sheet (SDS), or other appropriate documentation acceptable to the Department may be used to comply with this condition.

**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.****# 002 [25 Pa. Code §129.63]****Degreasing operations**

The permittee shall perform the following work practice standards for the parts washers:

(a) The remote reservoir cold cleaning machines shall have a permanent, conspicuous label summarizing the operating requirements contained in this permit for this source, pursuant to 25 Pa. Code § 129.63(a)(2)(i).

(b) The remote reservoir cold cleaning machines shall 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, pursuant to 25 Pa. Code § 129.63(a)(2)(ii).

**SECTION D. Source Level Requirements****# 003 [25 Pa. Code §129.63]****Degreasing operations**

The permittee should perform the following discretionary good operating practices, pursuant to 25 Pa. Code § 129.63(a)(2)(i)(A)-(C):

- (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.

**# 004 [25 Pa. Code §129.63]****Degreasing operations**

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, pursuant to 25 Pa. Code § 129.63(a)(4).

**# 005 [25 Pa. Code §129.63]****Degreasing operations**

The permittee shall operate the cold cleaning machines in accordance with the following procedures, pursuant to 25 Pa. Code § 129.63(a)(3):

- (a) 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.
- (b) 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.
- (c) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine.
- (d) Air agitated solvent baths may not be used.
- (e) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.

**VII. ADDITIONAL REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Source ID 116 includes the following remote reservoir cold cleaning machines:

- (a) One (1) located in the Heat Plant maintenance area
- (b) One (1) located in the Auto Shop
- (c) One (1) located in the DuPont Science Center.

**SECTION D. Source Level Requirements**

Source ID: 117

Source Name: EXEMPT SPARK IGNITION ENGINES

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: GROUP 3  
GROUP 5

**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 a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i).

[Compliance with this emission limit is demonstrated through the use of proper fuel as allowed herein.]

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the aggregate NO<sub>x</sub> emissions from all exempt engines (Source ID 114, 115, and 117) on site to less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis.

**# 003 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

(a) EG002 - 150 kW Matchbox Taylor EGEN with PSI Engine: The permittee shall comply with the emission standards in Table 1 of 40 CFR Part 60 Subpart JJJJ for this emergency stationary SI ICE, according to 40 CFR § 60.4233(e), as follows:

NO<sub>x</sub> = 2.0 g/HP-hr or 160 ppmvd at 15% O<sub>2</sub>

CO = 4.0 g/HP-hr or 540 ppmvd at 15% O<sub>2</sub>

VOC = 1.0 g/HP-hr or 86 ppmvd at 15% O<sub>2</sub>.

(b) EG003 - 30 kW Whitter Cummins EGEN with Cummins Engine: The permittee shall comply with the emission standards in Table 1 of 40 CFR Part 60 Subpart JJJJ for this emergency stationary SI ICE, according to 40 CFR § 60.4233(d), as follows:

NO<sub>x</sub> = 10.0 g/HP-hr

CO = 387 g/HP-hr.

[Compliance with the emission standards of 40 CFR Part 60 Subpart JJJJ is demonstrated through manufacturer specification sheets with emission data and/or certification of conformity associated with each engine, as applicable.]

**Fuel Restriction(s).****# 004 [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?**



**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee may operate this engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR Part 60 Subpart JJJJ.

**Operation Hours Restriction(s).**

**# 005 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

(a) In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described as follows, is prohibited, according to 40 CFR § 60.4243(d)(1) through (3):

(1) The permittee may operate the emergency stationary ICE for any combination of the purposes of maintenance checks and readiness testing for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (b) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (a). Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(b) If the permittee does not operate the engine according to the requirements of this condition, the engine will not be considered an emergency engine under 40 CFR Part 60 Subpart JJJJ and the engine must meet all requirements for nonemergency engines.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4237]  
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines  
What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall monitor the hours of operation of each emergency engine listed in Source ID 117 using a non-resettable hour meter, according to 40 CFR § 60.4237(c).

**IV. RECORDKEEPING REQUIREMENTS.**

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

The permittee shall keep records on site to demonstrate compliance that this engine is certified (i.e. certificate of conformity or USEPA or EU equivalent Tier certification, etc.) and in compliance with the emission standards as required by 40 CFR § Part 60 Subpart JJJJ.

**SECTION D. Source Level Requirements**

[This condition assures compliance with 40 CFR § 60.4243(b)(1): The permittee shall demonstrate compliance with the emission standards specified in 40 CFR § 60.4233(d) and (e) by purchasing an engine certified according to procedures specified in Subpart JJJJ, for the same model year and demonstrating compliance according to the methods specified in 40 CFR § 60.4243(a)(1).]

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain monthly records of the aggregate NOx emissions from all exempt engines on site, including pounds per hour, pounds per day, ozone season (i.e., the period from May 1 through September 30 of each year) sums, and 12-month rolling sums, to demonstrate compliance with the NOx emission limit for this source.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]**

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

**What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall keep records of conducted maintenance to demonstrate compliance, according to 40 CFR § 60.4243(a)(1).

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]**

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall keep records of the following information, according to 40 CFR § 60.4245(a):

- (a) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (b) Maintenance conducted on the engine.
- (c) Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]**

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. 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.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

**# 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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall operate and maintain this stationary SI ICE that achieves the emission standards as required in 40

**SECTION D. Source Level Requirements**

CFR Part 60 Subpart JJJJ 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?**

Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall comply with the emission standards of 40 CFR Part 60 Subpart JJJJ through engine certification to the emission standards, as applicable, for the same engine class and maximum engine power, according to 40 CFR § 60.4243(a).

**VII. ADDITIONAL REQUIREMENTS.**

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

Source ID 117 includes the following natural gas emergency generators:

(1) Taylor EGEN rated at 150 kW (261.5 hp); natural gas Power Solutions International Engine Model No. PSI-8.8L0012039 (build date 09/25/2018), located at The Matchbox Athletic Fields.

(2) Cummins EGEN rated at 30 kW (49.5 hp); natural gas Cummins Engine Model No. QSJ2.4 (build date 10/25/2016), located at Whittier Building; Engine No. J160110321; EPA Family GCExB02.4AAA.

The engines powering each generator set is certified to comply with the USEPA emission regulations under the provisions of 40 CFR Part 60 Subpart JJJJ.

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

The engines listed in Source ID 117 are subject to the requirements of Subpart JJJJ of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. In accordance with 40 CFR § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the USEPA and the Department. NSPS reports may be submitted electronically to EPA's Central Data Exchange: <https://cdx.epa.gov/>

**SECTION D. Source Level Requirements**

Source ID: 118

Source Name: 2.5 MW NG CATERPILLAR ENGINE 1

Source Capacity/Throughput: 23.280 MMBTU/HR

25,740.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GROUP 4

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

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

This engine is (1) one of the two (2) engines operating as part of the new electric generation plant located west of the existing boiler heat plant on Fieldhouse Lane. The engine is a Caterpillar, Model G3520 natural gas-fired unit, rated at 2.5 MWe, 3,629 bhp and 23.28 MMBTU/hr.

**SECTION D. Source Level Requirements**

Source ID: 119

Source Name: 2.5 MW NG CATERPILLAR ENGINE 2

Source Capacity/Throughput: 23.280 MMBTU/HR

25,740.000 CF/HR

Natural Gas

Conditions for this source occur in the following groups: GROUP 4

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

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

This engine is (1) one of the two (2) engines operating as part of the new electric generation plant located west of the existing boiler heat plant on Fieldhouse Lane. The engine is a Caterpillar, Model G3520 natural gas-fired unit, rated at 2.5 MWe, 3,629 bhp and 23.28 MMBTU/hr.

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1

Group Description: Heat Plant Boilers

Sources included in this group

ID	Name
031	HEAT PLANT BOILER 1A
032	HEAT PLANT BOILER 1B

**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 a combustion unit in excess of the rate of 0.4 pound per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

[Compliance with this condition is met by using natural gas or No. 2 fuel oil only, as specified herein.]

**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall limit the aggregate NOx emissions from all fuel consuming sources on-site to less than 25 tons per year, based on a 12-month rolling sum.

[Permit condition (a) streamlines compliance with the less stringent NOx emission limit for the aggregate of Boiler 1A (Source ID 031) and Boiler 1B (Source ID 032) of 27.085 tons per year derived from Plan Approva No. 23-0030A.]

(b) The permittee shall limit the total SOx emissions from the aggregate of Boiler 1A (Source ID 031) and Boiler 1B (Source ID 032) to 23.225 tons per year, based on a 12-month rolling sum.

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

(a) The permittee shall limit the NOx emissions from this individual boiler as follows when firing natural gas: 0.035 lb/MMBtu, 30 ppm, and 1.03 lb/hr.

(b) The permittee shall limit the NOx emissions from this individual boiler as follows when firing No. 2 fuel oil: 0.563 lb/MMBtu, 422 ppm, and 16.09 lb/hr.

[The method of compliance with the NOx emission limits of (a) and (b) of this condition is through source testing once every 5 years as described in Testing Condition #008 for this source.]

(c) The permittee shall limit the SOx emissions from this individual boiler as follows when firing No. 2 fuel oil: 0.515 lb/MMBtu, 278 ppm, and 14.72 lb/hr.

**Fuel Restriction(s).****# 004 [25 Pa. Code §123.22]****Combustion units**

(a) A person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in a combustion unit in the Southeast Pennsylvania air basin if the commercial fuel oil contains sulfur in excess of 500 ppm or 0.05% by weight sulfur content, pursuant to 25 Pa. Code § 123.22(e)(2)(i), except as described in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

(b) Commercial fuel oil that was stored in the Commonwealth by the ultimate consumer:

(1) Prior to July 1, 2016 which met the applicable maximum allowable sulfur content for commercial fuel oil through June 30, 2016 in subparagraph (a) at the time it was stored, may be used by the ultimate consumer in this Commonwealth on and after July 1, 2016.

**SECTION E. Source Group Restrictions.**

(2) Prior to September 1, 2020 which met the applicable maximum allowable sulfur content for commercial fuel oil through August 31, 2020 in subparagraph (a) at the time it was stored, may be used by the ultimate consumer in this Commonwealth on and after September 1, 2020.

(c) On and after September 1, 2020, a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in a combustion unit in the Southeast Pennsylvania air basin if the commercial fuel oil contains sulfur in excess of 15 ppm or 0.0015% by weight for No. 2 fuel oil or lighter, by weight sulfur content, pursuant to 25 Pa. Code § 123.22(e)(2)(i), except as described in 25 Pa. Code § 123.22(e)(2)(ii) and (iii).

[Compliance with this condition assures compliance with state regulation 25 Pa. Code § 123.22(e)(1), for the inner zone and federal regulation 40 CFR § 60.42c(d).]

**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall fire this combustion unit with natural gas or No. 2 fuel oil only.

[Note the Elective Restriction: Consuming No. 2 fuel oil during periods other than gas curtailment, gas supply emergencies, or periodic testing will result in the facility being subject to the requirements of 40 CFR Part 63 Subpart JJJJJJ.]

**# 006 Elective Restriction**

[Authority for this permit condition is derived from 25 Pa. Code § 127.35 and 40 CFR § 63.11195(e).]

(a) This boiler shall burn gaseous fuels not combined with any solid fuels, and liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

(b) Fuel switching from natural gas to solid fossil fuel, biomass, or liquid fuel will result in the facility being subject to the requirements of 40 CFR § 63 Subpart JJJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers located at Area Sources.

**Throughput Restriction(s).****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall limit the aggregate amount of fuel from the boilers listed in Source ID 031 and Source ID 032 as follows:

- (1) 300,302 gallons of No. 2 fuel oil per year
- (2) 350 MMSCF of natural gas per year

(b) The permittee shall limit the aggregate boiler heat input to 357,000 MMBtu per year for the boilers listed in Source ID 031 and Source ID 032.

(c) Per year is assumed to be a 12-month rolling sum.

[Note the Elective Restriction: Consuming No. 2 fuel oil during periods other than gas curtailment, gas supply emergencies, or periodic testing will result in the facility being subject to the requirements of 40 CFR Part 63 Subpart JJJJJJ.]

**II. TESTING REQUIREMENTS.****# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a source test on this boiler in accordance with 25 Pa. Code Chapter 139 and the Department's Source Testing Manual (274-0300-002) every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under

**SECTION E. Source Group Restrictions.**

such other conditions, within the capacity of the equipment, as may be requested by the Department.

(b) 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 the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

(c) The permittee shall determine a NO<sub>x</sub> emission factor in pounds of NO<sub>x</sub> per amount of fuel (SCF for natural gas and gallons for No. 2 fuel oil) as part of the source test. The emission factor shall be used in calculating NO<sub>x</sub> emissions (in tons per year) on a monthly basis.

(d) At least ninety (90) calendar 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.

(e) At least thirty (30) calendar days prior to the test(s), the Department shall be informed of the date and time of the test.

(f) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(g) 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.

**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

Southeast Region  
RA-EPSEstacktesting@pa.gov

Central Office  
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

(1) Test Date(s)

- (i) For protocols, provide the proposed date on which testing will commence or "TBD"
- (ii) For reports, provide the first and last day of testing

(2) Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

(3) Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

(4) Operating Permit Number and Testing Condition Reference.

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL."



**SECTION E. Source Group Restrictions.****III. MONITORING REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall calculate monthly the aggregate NOx emissions (in tons per year) for Boiler 1A (Source ID 031) and Boiler 1B (Source ID 032) using the NOx emission factor (in pounds of NOx/amount of fuel consumed) determined during the most recent source test and the monthly aggregate amount of fuel consumed.

**IV. RECORDKEEPING REQUIREMENTS.****# 011 [25 Pa. Code §123.22]****Combustion units**

The permittee shall maintain in electronic or paper format the record provided by the transferor for the shipment of commercial fuel oil as it changed hands to the permittee (ultimate consumer). This record must legibly and conspicuously contain the following information, in accordance with 25 Pa. Code § 123.22(g)(1) and (5):

- (a) The date of the sale or transfer.
- (b) The name and address of the transferor.
- (c) The name and address of the transferee.
- (d) The volume of commercial fuel oil being sold or transferred.
- (e) The identification of the sulfur content of the shipment of commercial fuel oil, determined using the sampling and testing methods specified in 25 Pa. Code § 123.22(f)(1) and § 139.16, expressed as one of the following statements for each shipment of No. 2 and lighter commercial fuel oil:

(1) Prior to September 1, 2020 - "The sulfur content of this shipment is 500 ppm or below."

(2) On and after September 1, 2020 - "The sulfur content of this shipment is 15 ppm or below."

- (f) The location of the commercial fuel oil at the time of transfer.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain records of monthly and 12-month rolling sums of NOx emissions for this source in order to show compliance with the facility-wide synthetic minor NOx emission limit of 25 tons per year.

**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall maintain monthly and 12-month rolling sums of the aggregate natural gas used and the aggregate No. 2 fuel oil used in the boilers listed in Source ID 031 and Source ID 032.

(b) The permittee shall maintain monthly and 12-month rolling sums of the aggregate heating input for the boilers listed in source ID 031 and Source ID 032.

**# 014 [25 Pa. Code §129.93]****Presumptive RACT emission limitations**

The permittee shall record each adjustment and inspection conducted in a permanently bound logbook or other method approved by the Department. The log shall contain at a minimum, the following information:

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

**V. REPORTING REQUIREMENTS.****# 015 Elective Restriction**

[Authority for this permit condition is derived from 25 Pa. Code § 127.35 and 40 CFR § 63.11195(e).]

The permittee shall notify the Department and the USEPA of fuel switching from natural gas to liquid fuel other than liquid fuel consumption during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel.

**SECTION E. Source Group Restrictions.****VI. WORK PRACTICE REQUIREMENTS.****# 016 [25 Pa. Code §129.93]****Presumptive RACT emission limitations**

The permittee shall conduct an annual adjustment or tune-up on each boiler. This adjustment shall include, at a minimum, the following:

- (a) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub>, and to the extent practicable minimize emissions of CO.
- (c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

**VII. ADDITIONAL REQUIREMENTS.****# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This boiler is equipped with flue gas recirculation during natural gas firing and low excess air during oil firing.

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 2

Group Description: Subpart Dc Regulation

Sources included in this group

ID	Name
031	HEAT PLANT BOILER 1A
032	HEAT PLANT BOILER 1B

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42c]  
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units  
Standard for sulfur dioxide.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 122.3]

Compliance with the fuel oil sulfur limits for this source may be determined based on a certification from the fuel supplier, pursuant to 40 CFR § 60.42c(h)(1), for distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 million Btu/hr).

[Compliance with this condition assures compliance with 25 Pa. Code § 139.16]

**III. MONITORING REQUIREMENTS.**

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]  
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units  
Reporting and recordkeeping requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 122.3]

The permittee shall monitor the amount and type of fuel consumed by this boiler on a monthly basis, pursuant to 40 CFR § 60.48c(g)(2).

**IV. RECORDKEEPING REQUIREMENTS.**

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]  
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units  
Reporting and recordkeeping requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 122.3]

The permittee shall maintain monthly records of the amount and type of fuel consumed in this boiler, pursuant to 40 CFR § 60.48c(g)(2).

**V. REPORTING REQUIREMENTS.**

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]  
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units  
Reporting and recordkeeping requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 122.3]

(a) The permittee shall report records of fuel supplier certifications, including a certified statement signed by the owner or operator of the facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period, pursuant to 40 CFR § 60.48c(e)(11).

(b) Fuel supplier certification shall include the following information, pursuant to 40 CFR § 60.48c(f)(1):

- (1) The name of the oil supplier;
- (2) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil;
- (3) The sulfur content of the oil.

**SECTION E. Source Group Restrictions.**

(c) Reports shall be submitted to the USEPA and the Department on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period.

(d) Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR §§ 60.48c(d), 60.48c(e)(11) and 60.48c(j) and shall be postmarked by the 30th day following the end of the reporting period.

(e) Pursuant to 40 CFR § 60.4, the permittee shall submit copies of all requests, reports, applications, submittals, and other communications to both USEPA and the Department.

[Compliance with this condition assures compliance with streamlined Regulation 25 Pa. Code § 139.16]

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 3

Group Description: All NOx Sources (for SMOP limit)

Sources included in this group

ID	Name
100	YORK CHILLING UNIT SI ENGINE
112	RACT EMERGENCY GENERATORS
114	EXEMPT COMPRESSION IGNITION ENGINES
115	EXEMPT ENGINES (PRE-2006)
117	EXEMPT SPARK IGNITION ENGINES

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

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall limit the aggregate NOx emissions from all fuel consuming sources on-site to less than 25 tons per year, based on a 12-month rolling sum.

[This permit condition streamlines compliance with any less stringent NOx emission limit applicable per source or source group basis.]

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall maintain records of monthly and 12-month rolling sums of NOx emissions for this source in order to show compliance with the facility-wide synthetic minor NOx emission limit of 25 tons per year.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 4

Group Description: Standby Electrical Generation Plant

Sources included in this group

ID	Name
118	2.5 MW NG CATERPILLAR ENGINE 1
119	2.5 MW NG CATERPILLAR ENGINE 2

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.12(a)(5).]

The permittee shall comply with the following emission standards for the stationary spark ignition internal combustion engine:

- (a) NO<sub>x</sub>: 0.50 g/bhp-hr and 4.0 lb/hr,
- (b) CO: 0.25 g/bhp-hr,
- (c) VOC: 0.25 g/bhp-hr,
- (d) Formaldehyde: 0.05 g/bhp-hr

[Compliance with this permit condition streamlines and demonstrates compliance with the NO<sub>x</sub>, CO, and VOC emission standards listed in Table 1 of 40 CFR Part 60 Subpart JJJJ for Non-Emergency Spark Ignition Natural Gas Stationary Engines greater than 500 HP manufactured after July 1, 2010.]

**Fuel Restriction(s).****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall fire the engine with natural gas only, as the term natural gas is defined in 40 CFR § 60.4248.

**# 003 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee may operate the engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee shall conduct a performance test to demonstrate compliance with the emission standards of 40 CFR § 60.4233, according to 40 CFR § 60.4243(e).

**Operation Hours Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the total power output to 10,800 MW-hr per year for both engines listed as Source ID 118 and Source ID 119, based on a 12-month rolling sum.

**II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall conduct performance testing every 8,760 hours or 3 years, whichever comes first, to demonstrate compliance, according to 40 CFR § 60.4243(b)(2)(ii), on at least one (1) of the engines listed as Source ID 118 and 119. 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. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and

**SECTION E. Source Group Restrictions.**

the PADEP Source Testing Manual.

(b) The stack test shall, at a minimum, test for NO<sub>x</sub>, CO, VOC, and formaldehyde emissions using Department approved methodology and 25 Pa. Code Chapter 139. The permittee shall demonstrate compliance with each emission limit established for this engine, as per Section 60.8 and Subpart JJJJ of 40 CFR Part 60, and Chapter 139 of the Rules and Regulations of the Department. Tests shall be conducted in accordance with provisions of EPA Test Methods further described in this permit.

(c) The permittee shall monitor and record the following operating parameters, at a minimum, during testing:

- (1) Pressure drop range across the catalyst bed of the oxidation catalyst,
- (2) Temperature of the oxidation catalyst zone of the oxidation catalyst,
- (3) Power output of the engine,
- (4) Amount of fuel consumed, and
- (5) Hours of operation.

(d) At least ninety (90) days prior to the test, the facility 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.

(e) At least thirty (30) days prior to the test, the permittee shall notify the Regional Air Quality Manager of the date and time of the test.

(f) Within sixty (60) days after the source test(s), an electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval [additional authority as per 40 CFR § 60.4244].

(g) 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.

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

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

Southeast Region  
RA-EPSEstacktesting@pa.gov

Central Office  
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

(1) Test Date(s)

- (i) For protocols, provide the proposed date on which testing will commence or "TBD"
- (ii) For reports, provide the first and last day of testing

(2) Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

(3) Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

(4) Testing Requirements (all that apply):

**SECTION E. Source Group Restrictions.**

- (i) Operating Permit No.
- (ii) Applicable federal subpart(s) (i.e. 40 CFR 60 Subpart JJJJ)

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

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

Plan Approval No. 23-0030B requires a source test to confirm compliance with the NO<sub>x</sub>, CO, VOC, and formaldehyde emission limits applicable to Source ID 118 and Source ID 119. A source test was conducted on 01/04/2024 and the source test report was received by DEP on 03/06/2024. The permittee's test report received on 03/06/2024 indicates that the source test results demonstrate compliance with plan approval requirements; however, DEP Source Testing Program has not completed a formal review of the source test report to determine if the test results are acceptable to use for compliance purposes at this time. Plan Approval No. 23-0030B terms and conditions are incorporated into this permit based upon a preliminary review of the source test report. If DEP Source Testing Program determines that the source test is not acceptable to use for compliance purposes, the permittee will be required to retest in accordance with conditions specified in Plan Approval No. 23-0030B and other such conditions, within the capacity of the equipment, which may be requested by DEP.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122 and Chapter 139.]

The permittee shall follow the procedures in paragraphs (a) through (c) of this condition, according to 40 CFR § 60.4244:

- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR § 60.8.
- (b) The permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR § 60.8.
- (c) If the stationary SI internal combustion engine is non-operational, the permittee does not need to startup the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122 and Chapter 139.]

For each performance test conducted to show compliance with the concentration of NO<sub>x</sub> in the exhaust, the permittee shall follow the procedures in paragraphs (a) through (f) of this condition, according to 40 CFR § 60.4244 and as specified in Table 2 to 40 CFR Part 60 Subpart JJJJ as follows:

- (a) Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine using Test Method 1 or 1A of 40 CFR part 60, Appendix A-1, if measuring flow rate.

(1) Alternatively, for NO<sub>x</sub>, O<sub>2</sub>, and moisture measurement, ducts less than or equal to 6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and less than or equal to 12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (3-point long line). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Test Method 1 of 40 CFR part 60, Appendix A, the duct may be sampled at 3-point long line; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Test Method 7E of 40 CFR part 60, Appendix A.



**SECTION E. Source Group Restrictions.**

(b) Determine the O<sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location using Test Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A-2 or ASTM Method D6522-00.

(1) Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for NO<sub>x</sub> concentration.

(c) If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust using Test Method 2 or 2C of 40 CFR part 60, Appendix A-1 or Test Method 19 of 40 CFR Part 60, Appendix A-7.

(d) If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Test Method 4 of 40 CFR Part 60, Appendix A-3, Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM Method D 6348-03.

(1) Measurements to determine moisture must be made at the same time as the measurement for NO<sub>x</sub> concentration.

(e) Measure NO<sub>x</sub> at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device using Test Method 7E of 40 CFR Part 60, Appendix A-4, ASTM Method D6522-00 (Reapproved 2005), Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM Method D 6348-03.

(1) Results of this test consist of the average of the three 1-hour or longer runs.

(f) To determine compliance with the NO<sub>x</sub> mass per unit output emission limitation, convert the concentration of NO<sub>x</sub> in the engine exhaust using Equation 1 of 40 CFR § 60.4244(d).

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]**

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

**What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122 and Chapter 139.]

For each performance test conducted to show compliance with the concentration of CO or VOC in the exhaust, the permittee shall follow the procedures in this condition, according to 40 CFR § 60.4244 and as specified in Table 2 to 40 CFR Part 60 Subpart JJJJ as follows:

(a) Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine using Test Method 1 or 1A of 40 CFR Part 60, Appendix A-1, if measuring flow rate.

(1) Alternatively, for CO or VOC, O<sub>2</sub>, and moisture measurement, ducts less than or equal to 6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and less than or equal to 12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (3-point long line). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Test Method 1 of 40 CFR Part 60, Appendix A, the duct may be sampled at 3-point long line; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Test Method 7E of 40 CFR Part 60, Appendix A.

(b) Determine the O<sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location using Test Method 3, 3A, or 3B of 40 CFR Part 60, Appendix A-2 or ASTM Method D6522-00 (Reapproved 2005).

(1) Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or VOC concentration.

(c) If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust using Test Method 2 or 2C of 40 CFR Part 60, Appendix A-1 or Test Method 19 of 40 CFR Part 60, Appendix A-7.

(d) If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Test Method 4 of 40 CFR Part 60, Appendix A-3, Method 320 of 40 CFR Part 63, Appendix A, or ASTM Method D 6348-03.

**SECTION E. Source Group Restrictions.**

(1) Measurements to determine moisture must be made at the same time as the measurement for CO or VOC concentration.

(e) Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device using Test Method 10 of 40 CFR Part 60, Appendix A4, ASTM Method D6522-00 (Reapproved 2005), Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM Method D 6348-03.

(1) Results of this test consist of the average of the three 1-hour or longer runs.

(f) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of 40 CFR § 60.4244(e).

(g) Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device using Test Methods 25A and 18 of 40 CFR Part 60, Appendices A-6 and A-7, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Test Method 18 of 40 CFR Part 60, Appendix A-6, Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM Method D 6348-03.

(1) Results of this test consist of the average of the three 1-hour or longer runs.

(h) When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of 40 CFR § 60.4244(f).

(i) If the permittee chooses to measure VOC emissions using either Test Method 18 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, then the permittee has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Test Method 25A. The results from Test Method 18 and Test Method 320 can be corrected for response factor differences using Equations 4 and 5 of 40 CFR § 60.4244(g). The corrected VOC concentration can then be placed on a propane basis using Equation 6 of 40 CFR § 60.4244(g).

**III. MONITORING REQUIREMENTS.****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following operating parameters of the engine on a continuous basis:

- (a) natural gas consumption through the use of a fuel meter.
- (b) hours of operation through the use of a non-resettable hour meter.
- (c) total power output in MW-hr through the use of the automated monitoring system.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following control device operating parameters through the use of the automated monitoring system:

- (a) The permittee shall monitor the oxidation catalyst inlet temperature on a continuous basis.
- (b) The permittee shall monitor the pressure drop across the catalyst bed on a continuous basis.

**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall calculate monthly post-control NO<sub>x</sub>, CO, VOC, and formaldehyde emissions in tons per month, including 12-month rolling sums, from each engine based on actual power output per month from actual operations (MW-hr/month) and the most recent emission factor (lb/MW-hr) as determined by the most recent source test.

(b) The permittee shall calculate monthly post-control combined HAP emissions, including 12-month rolling sums, from each engine based on AP-42 emission factors of Chapter 3.2, actual natural gas usage per month, vendor supplied oxidation catalyst control efficiency, plus controlled formaldehyde emissions.

**SECTION E. Source Group Restrictions.****IV. RECORDKEEPING REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

For each operating scenario that reaches a continuous one-hour period, the permittee shall maintain records of the following control device operating parameters through the use of the automated monitoring system:

- (a) The permittee shall maintain records of the one (1) - hour block average oxidation catalyst inlet temperatures.
- (b) The permittee shall maintain records of the one (1) - hour block average pressure drop range across the catalyst bed.

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

The permittee shall maintain records of the following operating parameters for the engine:

- (a) natural gas consumption on a monthly basis, including 12-month rolling sums.
- (b) hours of operation on a monthly basis, including 12-month rolling sums.
- (c) total power output in MW-hr on a monthly basis, including 12-month rolling sums.

**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the following for the oxidation catalyst associated with this source:

- (a) inspections performed,
- (b) maintenance performed,
- (c) any deficiencies, and
- (d) any corrective actions taken.

[This condition streamlines compliance with the requirements of 40 CFR § 60.4243(b)(2)(ii).]

**# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall maintain records of NO<sub>x</sub>, CO, VOC, formaldehyde and combined HAP emissions from this unit, in tons per month, on a monthly basis, including 12-month rolling sums.

(b) The permittee shall maintain records of NO<sub>x</sub>, CO, VOC, and formaldehyde emissions (in g/bhp-hr) as determined during the most recent stack test, demonstrating compliance with each emission limit established for each engine listed in this permit.

**# 018 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall maintain records documenting that the engine meets the emission standards of 40 CFR Part 60 Subpart JJJJ, according to 40 CFR § 60.4245(a)(4) because the engine is not a certified engine.

**V. REPORTING REQUIREMENTS.****# 019 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall submit an initial notification as required in 40 CFR § 60.7(a)(1) to PADEP and USEPA. The notification must include the information in paragraphs (a) through (e) of this condition:

- (a) Name and address of the owner or operator;
- (b) The address of the affected source;
- (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and

**SECTION E. Source Group Restrictions.**

engine displacement;  
 (d) Emission control equipment; and  
 (e) Fuel used.

[Initial notification recieved by DEP on 02/01/2023.]

**VI. WORK PRACTICE REQUIREMENTS.****# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall operate and maintain the associated control system according to the manufacturer's specifications and good air pollution control practices.

(b) The permittee shall operate this source only when the associated control device is operating properly.

**# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall replace the catalyst of the oxidation catalyst control within 90 days of submitting source test results showing that post-control CO emissions exceeded 0.131 g/bhp-hr or when the control efficiency falls below 90%, whichever is less stringent, as determined during any source test.

**# 022 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain and operate the oxidation catalyst pressure drop across each catalyst bed within a range of 0.01 - 11.0 inches water gauge.

**# 023 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

When the engine has operated for at least one (1) hour continuously, the permittee shall maintain and operate the oxidation catalyst inlet temperature between 550° to 1,250°F (based on a 1-hour average).

**# 024 [25 Pa. Code §129.203]****Stationary internal combustion engines.**

(a) By October 31 of each year, the permittee 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 the same period.

(b) The permittee 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 3.0 grams of NOx per brake horsepower-hour.

**# 025 [25 Pa. Code §129.204]****Emission accountability.**

(a) If the affected source(s) has NOx CEMS, the permittee shall determine actual emissions in accordance with the CEMS data reported to the Department. 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.

(b) If the permittee is not required to monitor NOx emissions with a CEMS, one of the following shall be used to determine actual emissions of NOx:

(1) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.

(2) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:

(i) 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."

(ii) 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.

**SECTION E. Source Group Restrictions.**

(3) CEMS data, if the permittee elects to monitor NO<sub>x</sub> emissions with a CEMS. The permittee 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.

(4) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the permittee may request an adjustment to the allowable emissions calculations set forth in §§ 129.201—129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

**# 026 [25 Pa. Code §129.204]****Emission accountability.**

(a) The permittee shall surrender to the Department one CAIR NO<sub>x</sub> allowance and one CAIR NO<sub>x</sub> Ozone Season allowance, as defined in 40 CFR 96.102 and 96.302 (relating to definitions), for each ton of NO<sub>x</sub> 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 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.

(b) 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 permittee may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the permittee's other facilities.

(c) By November of each year, the permittee shall surrender the required NO<sub>x</sub> allowances to the Department's designated NO<sub>x</sub> allowance tracking system account and provide to the Department, in writing, the following:

- (1) The serial number of each NO<sub>x</sub> allowance surrendered.
- (2) The calculations used to determine the quantity of NO<sub>x</sub> allowances required to be surrendered.

(d) If the permittee fails to comply with subsection (c), the permittee shall by December 31 surrender three NO<sub>x</sub> allowances of the current or later year vintage for each NO<sub>x</sub> allowance that was required to be surrendered by November 1 of that year.

(e) The surrender of NO<sub>x</sub> allowances under subsection (d) does not affect the liability of the permittee 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 permittee demonstrates that a lesser number of days should be considered.

- (2) Each ton of excess emissions is a separate violation.

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NO<sub>x</sub> Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NO<sub>x</sub> Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NO<sub>x</sub> Ozone Season Trading Program and CSAPR NO<sub>x</sub> Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NO<sub>x</sub> Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season (though DEP will accept CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances of current year vintage from other states, if available). Accordingly, the permittee shall surrender CSAPR NO<sub>x</sub> Annual allowances and

**SECTION E. Source Group Restrictions.**

either CSAPR NOx Ozone Season Group 2 allowances or CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402, 97.802, and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

**# 027 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall operate and maintain the stationary SI ICE that achieves the emission standards as required in 40 CFR § 60.4233 over the entire life of the engine.

**# 028 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122.]

The permittee shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, according to 40 CFR § 60.4243(b)(2)(ii).

**VII. ADDITIONAL REQUIREMENTS.**

**# 029 [25 Pa. Code §127.441]  
Operating permit terms and conditions.**

This engine is subject to the requirements of Subpart JJJJ of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. In accordance with 40 C.F.R. § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the USEPA and the PA Department of Environmental Protection. The USEPA copies shall be forwarded to:

Office of Air and Radiation Division - Permit Branch (3ED21)  
United States Environmental Protection Agency  
Region 3  
Four Penn Center  
1600 John F. Kennedy Boulevard  
Philadelphia, PA 19103-2852

Electronic Reporting through USEPA Central Data Exchange: <https://cdx.epa.gov/>

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 5

Group Description: Emergency Engines

Sources included in this group

ID	Name
112	RACT EMERGENCY GENERATORS
114	EXEMPT COMPRESSION IGNITION ENGINES
115	EXEMPT ENGINES (PRE-2006)
117	EXEMPT SPARK IGNITION ENGINES

**I. RESTRICTIONS.****Operation Hours Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall limit the total hours of operation (emergency and non-emergency) to 100 hours per year for each individual engine listed in this source group.

[This condition streamlines compliance with presumptive RACT hours of operation requirements as per 25 Pa. Code § 129.93(c)(5) for the engines listed in Source ID 112.]

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall record the hours of operation for each engine listed in this source group on a monthly basis, and 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.**

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

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this State Only facility.



**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
031	HEAT PLANT BOILER 1A		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.035	Lbs/MMBTU	natural gas	NOX
0.563	Lbs/MMBTU	No. 2 fuel oil	NOX
1.030	Lbs/Hr	natural gas	NOX
16.090	Lbs/Hr	No. 2 fuel oil	NOX
30.000	PPMV	natural gas	NOX
422.000	PPMV	No. 2 fuel oil	NOX
0.400	Lbs/MMBTU	Particulate Matter	PM10
0.515	Lbs/MMBTU	No. 2 fuel oil	SOX
14.720	Lbs/Hr	No. 2 fuel oil	SOX
23.225	Tons/Yr	combined both boilers	SOX
278.000	PPMV	No. 2 fuel oil	SOX
032	HEAT PLANT BOILER 1B		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.035	Lbs/MMBTU	natural gas	NOX
0.563	Lbs/MMBTU	No. 2 fuel oil	NOX
1.030	Lbs/Hr	natural gas	NOX
16.090	Lbs/Hr	No. 2 fuel oil	NOX
30.000	PPMV	natural gas	NOX
422.000	PPMV	No. 2 fuel oil	NOX
0.400	Lbs/MMBTU	Particulate Matter	PM10
0.515	Lbs/MMBTU	No. 2 fuel oil	SOX
14.720	Lbs/Hr	No. 2 fuel oil	SOX
23.225	Tons/Yr	combined both boilers	SOX
278.000	PPMV	No. 2 fuel oil	SOX
100	YORK CHILLING UNIT SI ENGINE		
<b>Emission Limit</b>		<b>Pollutant</b>	
1.000	GRAMS/HP-Hr		NOX
0.040	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV		SOX
112	RACT EMERGENCY GENERATORS		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.040	gr/DRY FT3	Particulate Matter	PM10
500.000	PPMV		SOX
114	EXEMPT COMPRESSION IGNITION ENGINES		
<b>Emission Limit</b>		<b>Pollutant</b>	
2.750	Tons/OZNESEAS	all exempt engines on site	NOX
6.600	Tons/Yr	all exempt engines on site	NOX
100.000	Lbs/Hr	all exempt engines on site	NOX
1,000.000	Lbs/Day	all exempt engines on site	NOX
0.040	gr/DRY FT3		PM10

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor
115	EXEMPT ENGINES (PRE-2006)
<b>Emission Limit</b>	
2.750 Tons/OZNESEAS	all exempt engines on site
6.600 Tons/Yr	all exempt engines on site
100.000 Lbs/Hr	all exempt engines on site
1,000.000 Lbs/Day	all exempt engines on site
0.040 gr/DRY FT3	
<b>Pollutant</b>	
	NOX
	NOX
	NOX
	NOX
	PM10
117	EXEMPT SPARK IGNITION ENGINES
<b>Emission Limit</b>	
2.750 Tons/OZNESEAS	all exempt engines on site
6.600 Tons/Yr	all exempt engines on site
100.000 Lbs/Hr	all exempt engines on site
1,000.000 Lbs/Day	all exempt engines on site
0.040 gr/DRY FT3	
<b>Pollutant</b>	
	NOX
	NOX
	NOX
	NOX
	PM10
118	2.5 MW NG CATERPILLAR ENGINE 1
<b>Emission Limit</b>	
0.250 GRAMS/HP-Hr	
0.050 GRAMS/HP-Hr	
0.500 GRAMS/HP-Hr	
0.250 GRAMS/HP-Hr	
<b>Pollutant</b>	
	CO
	Formaldehyde
	NOX
	VOC
119	2.5 MW NG CATERPILLAR ENGINE 2
<b>Emission Limit</b>	
0.250 GRAMS/HP-Hr	
0.050 GRAMS/HP-Hr	
0.500 GRAMS/HP-Hr	
0.250 GRAMS/HP-Hr	
<b>Pollutant</b>	
	CO
	Formaldehyde
	NOX
	VOC

**Site Emission Restriction Summary**

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



**SECTION G. Emission Restriction Summary.**

**SECTION H. Miscellaneous.**

(a) The following previously issued plan approvals and operating permits serve as the basis for certain terms and conditions listed in this operating permit:

- (1) RACT Operating Permit No. 23-0030
- (2) Plan Approval No. 23-0030 (Source ID 100 - York Natural Gas Chiller Engine with Catalytic Oxidizer)
- (3) Plan Approval No. 23-0030A (Source 031 - Heat Plant Boiler 1A and Source ID 032 - Heat Plant Boiler 1B)

(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:

(1) The following RACT Boilers do not require additional monitoring or recordkeeping pursuant to 25 Pa. Code § 135.2(4):

- (i) Ashton House (1) Ashton House (0.494 MMBTU/hr - Natural Gas)
- (ii) BCC Hall (2) (0.140 MMBTU/hr (each) - Natural Gas)
- (iii) Mary Lyon 1 (0.649 MMBTU/hr - Natural Gas)
- (iv) Mary Lyon 4 (1.860 MMBTU/hr - Natural Gas)
- (v) Mertz Dormitory (2) (1.273 MMBTU/hr (each) - Natural Gas)
- (vi) Palmer/Pitt (3) (0.399 MMBTU/hr (each) - Natural Gas)
- (vii) Roberts (1.077 MMBTU/hr - Natural Gas)
- (viii) Ware Pool (2.049 MMBTU/hr - Natural Gas)
- (ix) Woolman House (0.494 MMBTU/hr - No. 2 Fuel Oil)
- (x) 404 Elm (2) (0.199 MMBTU/hr (each) - Natural Gas)

(2) The following exempt sources do not require additional monitoring or recordkeeping pursuant to 25 Pa. Code § 127.14:

- (i) RFD No. 23-A01-632: Installation of a 200,000 BTU/hr boiler at Martin Hall
- (ii) RFD No. 23-A01-631: Installation of a 1-175,000 BTU/hr boiler; and 1-450,000 BTU/hr boiler at Papazion Hall \*2021 REMOVED\*
- (iii) RFD No. 23-A01-630: Installation of 2-1.273 BTU/hr boilers at Mertz dormitory
- (iv) RFD No. 23-A01-843 Peerless Hot Water Boiler (Sharples I and II): 0.34 MMBTU/hr rated heat input capacity
- (v) RFD No. 23-A01-843 Carrier Hot Air Furnace (Sharples III): 0.08 MMBTU/Hr rated heat input capacity
- (vi) RFD No. 23-A01-843 Peerless Hot Water Boiler (Sharples IV): 0.228 MMBTU/hr rated heat input capacity
- (vii) RFD No. 23-A01-843 Peerless Hot Water Boiler (Sharples V): 0.228 MMBTU/hr rated heat input capacity \*2021 REMOVED\*
- (viii) RFD No. 23-A01-628 (3) Natural Gas Boilers located at DuPont Science Center \*2021 NOT INSTALLED\*
- (ix) Martin (0.200 MMBTU/hr - Natural Gas)
- (x) Tennis Pavilion Carrier Roof-Pack (0.525 MMBTU/hr - Natural Gas)
- (xi) Mary Lyon 4 #2 (0.140 MMBTU/hr - Natural Gas)
- (xii) #1 Whittier (0.140 MMBTU/hr - Natural Gas)
- (xiii) Electric York Chiller located in the Chiller Plant
- (xiv) RFD No. 4179: Replace No. 6 fuel oil with No. 2 fuel oil in Source ID 031 (Heat Plant Boiler 1A) and Source ID 032 (Heat Plant Boiler 1B)
- (xv) RFD No. 4333: (2) 100,000 Btu/hr natural gas Aerco Boilers and (2) 199,000 Btu/hr natural gas Hot Water Heaters located in the multipurpose fitness center at Field House Lane (Matchbox Building)
- (xvi) RFD No. 4340: (2) 1.0 MM Btu/hr natural gas Aerco Boilers and (2) 750,000 natural gas Hot Water Heaters located at Willets Hall
- (xvii) RFD No. 5182: (2) 2.0 MMBtu/hr natural gas Aerco Boilers and (1) 1.35 Hot Water Heater located at Dana/Hallowell Hall
- (xviii) RFD No. 5186: (1) 1.35 MMBtu/hr natural gas Weil-McLain Boiler located at 101 Chester Road
- (xix) RFD No. 7126: (3) 6.0 MMBtu/hr natural gas Aeroco BMK-6000 boilers located at North Chiller Plant
- (xx) (5) less than 5.0 MMBtu/hr natural gas boilers
- (xi) RFD No. 6891 - Pilor Program to use bio-fuel or vegetable oil in the Boiler Plant on a temporary basis; this project was not pursued.

(c) The data in Section A, Site Inventory List, for capacity and fuel/material and the source capacity descriptions and the permit maps in Section D are for descriptive purposes and are not considered as maximum source capacities or design limitations or enforceable conditions. Source limits are indicated in the text conditions of Sections D and E and are listed in Section G of this Title V Operating Permit.

**SECTION H. Miscellaneous.**

(d) JUNE 2006: This Title V Operating Permit No. 23-00030 (APS ID: 345745, Auth ID: 614247) has been renewed for Swarthmore College.

-----

(e) SEPTEMBER 2006: This Title V Operating Permit No. 23-00030 (APS ID: 345745, Auth ID: 636589) has been administratively amended to incorporate the following changes:

- (1) Source ID(s): 031 and 032, Condition #002 - Total 12-month NO<sub>x</sub> emission limit changed to 27.085 tons/year, as a 12-month rolling sum.
  - (2) Source ID(s): 031 and 032, Condition #002 - Total 12-month SO<sub>x</sub> emission limit changed to 23.225 tons/year, as a 12-month rolling sum.
  - (3) Source ID(s): 031 and 032, Condition #004 - Total 12-month fuel (No. 6 oil) throughput limit changed to 600,000 gallons/year, as a 12-month rolling sum .
  - (4) Inclusion of a new recording requirement in Section C (Site Level Requirements). This condition establishes a Compliance Certification reporting period from January 1st through December 31st of the previous year and a submission deadline of April 1st.
- 

(f) NOVEMBER 2006: This Title V Operating Permit No. 23-00030 (APS ID: 345745, Auth ID: 651983) has been administratively amended to correct errors in the amended TVOP (renewal). The following revisions have been addressed in the amended TVOP (renewal):

- (1) Section G (Miscellaneous) - The fuel type for the 20-kW Wharton Generator was changed from natural gas to diesel.
  - (2) Section G (Miscellaneous) - The fuel type for the 15-kW Worth Generator was changed from dual fuel to natural gas only.
  - (3) Section(s) A and D, Source ID: 112 - The Permit Map for this source was changed to remove FML01 and FML03 and replaced with FML03.
  - (4) Section D, Source ID: 112, Condition #004 - The fuel restriction condition was changed to allow this source to only burn No. 2 fuel oil.
  - (5) Section D, Source ID: 002, Condition #005 - The testing requirement was changed to require the source to burn only No. 6 fuel oil while conducting performance tests.
  - (6) Section D, Source ID: 003, Condition #004 - A new testing requirement was incorporated. The testing requirement requires that a performance test be performed on this source no later than twelve (12) months prior to permit expiration. The performance test shall be conducted while the source burns only No. 6 fuel oil.
- 

(g) JUNE 2011: This Title V Operating Permit (APS ID: 345745, Auth ID: 859494) has been renewed.

-----

(h) JUNE 2016: This SYNTHETIC MINOR Operating Permit has been renewed (APS ID: 345745, AUTH ID: 1100703). The following items have been addressed with this renewal permit:

- (1) The facility is no longer a Title V Facility; facility-wide NO<sub>x</sub> emissions are now restricted to less than 25 tons per year due to the removal of Source ID 002 (Heat Plant Boiler 2) and Source ID 003 (Heat Plant Boiler 3) and the switch from No. 6 fuel oil to primary natural gas and secondary No. 2 fuel oil. All references to Chapter 127, Section 500 regulations are no longer applicable and have been deleted.
- (2) Section C has been updated according to SERO Permitting Requirements.
- (3) RACT Boilers are now listed under (b)(1) of Section G of the permit pursuant to 135.2. Exempt sources, including small natural gas boilers and heaters, are now listed under (b)(2) of Section G of the permit.
- (4) Exempt (RFD) Emergency Generators are now listed as Source ID 115 in Site Inventory (Section A) and appear in Section D (Source Level Requirements) with the applicable NO<sub>x</sub> emission limit threshold and recordkeeping for exempt engines.
- (5) RACT Emergency Generators are now listed as Source ID 112 in Site Inventory (Section A) and appear in Section D (Source Level Requirements) with the Presumptive RACT permit conditions listed, as applicable.
- (6) The remote reservoir parts washer is now listed as Source ID 116 in Site Inventory (Section A) and appears in Section D (Source Level) with applicable requirements from 25 Pa. Code § 129.63 listed.
- (7) Source ID 114 has been added to include applicable requirements for the new MTU diesel emergency generator, including the requirements of 40 CFR Part 60 Subpart IIII.

**SECTION H. Miscellaneous.**

(8) RFD No. 4179, 4333, 4340, 5182, and 5186 have been added to Section G (b)(2).

-----

(i) JUNE 2021: The SMOP is renewed (APS No. 345745; AUTH ID 1334394). The following items have been addressed with this renewal permit:

(1) The Responsible Official has been updated from Mr. C. Stuart Hain to Mr. Andrew Feick, Associate VP Facilities. The permit contact has been updated from Mr. Ralph Thayer to Mr. Jim Adams, Director of Maintenance.

(2) Section B and Section C have been updated to the most current template language used for State Only Operating Permits issued in the Southeast Region.

(3) Source ID 031 and 032 (Boilers) - The total amount of No. 2 fuel oil burned by the two (2) heat plant boilers has been revised from 892,446 gallons per 12-month rolling period to 300,302 gallons per 12-month rolling period.

(4) Diesel EGENs (Source ID 114) - A new 600 kW diesel EGEN has been added to Source ID 114 in order to include the applicable requirements of 40 CFR Part 60 Subpart IIII. Source ID 114, now named "Exempt Compression Ignition Engines" has been modified to include both the Dana/Hallowell MTU previously listed and the MTU more recently installed at Singer Hall.

(5) Source ID 116 (Parts Washer) - Two (2) new remote reservoir parts washers have been added to Source ID 116; one located in the auto shop, the other located in the DuPont Science Center (the existing unit is located in the Heat Plant). The requirements of 25 Pa. Code § 129.63 apply to each unit listed under Source ID 116.

(6) Natural Gas EGENs (Source ID 117) - Two (2) new natural gas EGENs have been added to the permit as Source ID 117 (Exempt Spark Ignition Engines) in order to include applicable requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines.

(7) Eight (8) new natural gas boilers have been added to Section H under (b)(2)(xix) and (xx); each unit is less than 10.0 MMBtu/hr and are considered sources of minor significance.

(j) MAY 2024: Administrative Amendment (AUTH ID 1484420) to incorporate terms and conditions of Plan Approval No. 23-0030B. Plan Approval No. 23-0030B was issued for the installation of two (2) 2.5 megawatt (MW) engines fired by natural gas. Emissions of Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Hazardous Air Pollutants (HAP) from each engine are reduced through the use of oxidation catalyst. The engines are designated as Source ID 118 and Source ID 119, respectively. The oxidation catalysts are designated as CD18 and CD19, respectively. The amendment also incorporates additional operating restrictions applicable to existing sources in order for the facility to remain a synthetic minor for NOx emissions.



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

---