



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

# STATE ONLY SYNTHETIC MINOR OPERATING PERMIT

Issue Date: December 14, 2023 Effective Date: December 14, 2023

Expiration Date: December 13, 2028

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: 60-00001

Synthetic Minor

Federal Tax Id - Plant Code: 24-0772407-1

C	Owner Information			
Name: BUCKNELL UNIV				
Mailing Address: UNIVERSITY AVE				
PHYSICAL PLANT				
LEWISBURG, PA 17837				
Plant Information				
Plant: BUCKNELL UNIV/LEWISBURG CAMPUS				
Location: 60 Union County	60904 East Buffalo Township			
SIC Code: 8221 Services - Colleges And Universities				
Responsible Official				
Name: JEFFREY LOSS				
Title: ASSOCIATE VP OF FAC.				
Phone: (570) 577 - 1896	Email: jeffrey.loss@bucknell.edu			
Permit Contact Person				
Name: GREGORY KOONTZ				
Title: DIRECTOR ENERGY UTILITIES				
Phone: (570) 577 - 1896	Email: grk015@bucknell.edu			
[Signature]				
MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM	MANAGER, NORTHCENTRAL REGION			



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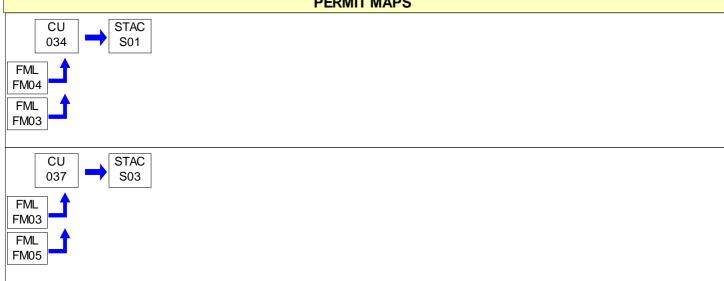




#### **SECTION A. Site Inventory List**

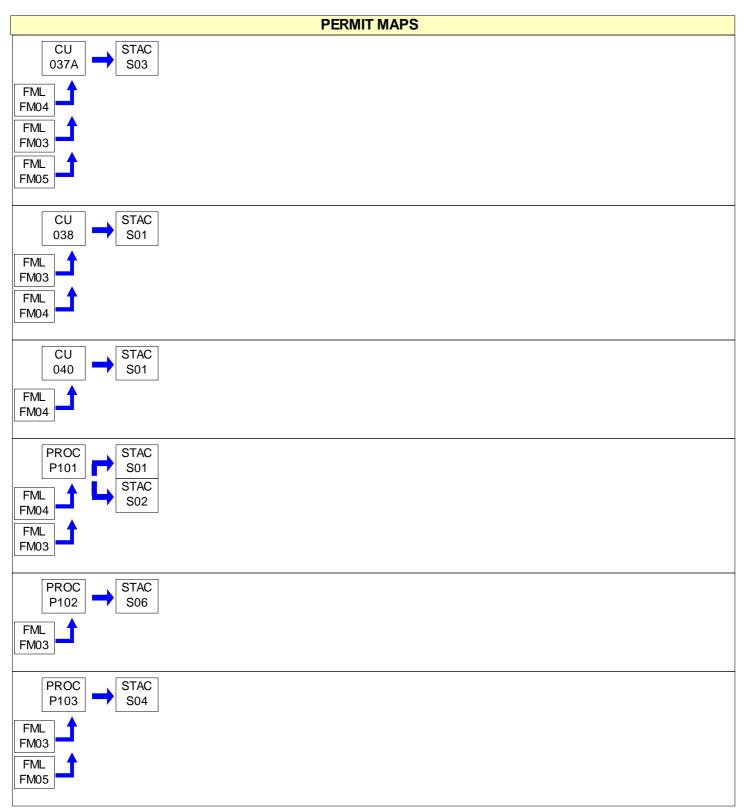
Source ID	O Source Name	Capacity/Throughput	Fuel/Material
034	TAMPELLA BOILER		
037	SMALL RACT BOILERS & FURNACES		
037A	SMALL NON-RACT BOILERS & FURNACES		
038	INDECK BOILER		
040	HRSG WITH DUCT BURNER		
P101	COMBUSTION TURBINE		
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FM03	#2 FUEL OIL		
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FM05	PROPANE		
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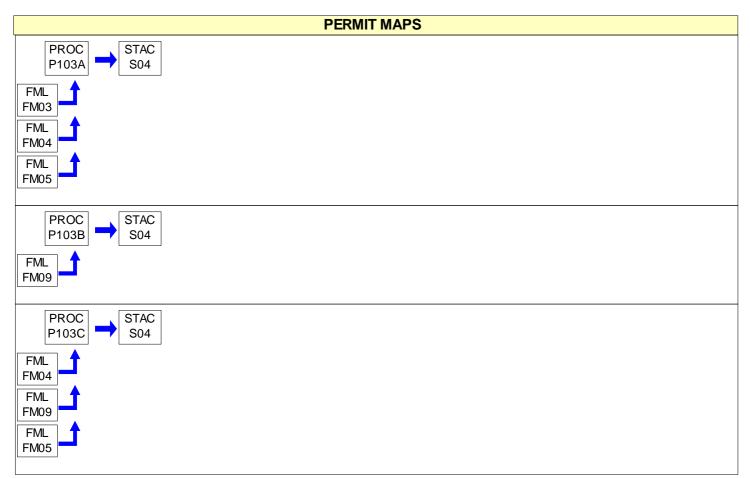
















#001 [25 Pa. Code § 121.1]

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.





- (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:







- (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:





- (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 NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:





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

# #014 [25 Pa. Code § 127.3]

# Operational Flexibility.

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

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





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

#### #015 [25 Pa. Code § 127.11]

#### Reactivation

- (a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#### #016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

- (a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].
- (b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

# #017 [25 Pa. Code § 121.9]

## Circumvention.

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#### #018 [25 Pa. Code §§ 127.402(d) & 127.442]

# Reporting Requirements.

- (a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.
- (b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.
- (c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given in the permit transmittal letter, or otherwise notified)

- (d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.
- (e) Any records, reports or information submitted to the Department shall be available to the public except for such





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

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

## Sampling, Testing and Monitoring Procedures.

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

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

#### Recordkeeping.

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

# #021 [25 Pa. Code § 127.441(a)]

**Property Rights.** 

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

#022 [25 Pa. Code § 127.447]

**Alternative Operating Scenarios.** 

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





#023 [25 Pa. Code §135.3]

Reporting

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

#024 [25 Pa. Code §135.4]

**Report Format** 

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







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

#### I. RESTRICTIONS.

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

60-00001

## # 001 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

The permittee shall not permit the emission of fugitive air contaminants into the outdoor atmosphere from a source other than the following:

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

#### # 002 [25 Pa. Code §123.2]

#### **Fugitive particulate matter**

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

# # 003 [25 Pa. Code §123.41]

#### Limitations

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

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

#### # 004 [25 Pa. Code §123.42]

#### **Exceptions**

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

- (1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations:
- (2) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions:
- (3) The emissions results from sources specified in (1) through (8) in condition #001 herein.

#### # 005 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the permittee electing these Synthetic Minor restrictions.]

- (1) The total combined nitrogen oxides emissions, expressed as nitrogen dioxide (NO2), from all sources at the facility shall not equal or exceed 100 tons in any 12 consecutive month period.
- (2) The total combined carbon monoxide emissions from all sources at the facility shall not equal or exceed 100 tons in any 12 consecutive month period.
- (3) The total combined sulfur oxides emissions, expressed as sulfur dioxide (SO2), from all sources at the facility shall not equal or exceed 100 tons in any 12 consecutive month period.



60-00001



# **SECTION C.** Site Level Requirements

# Fuel Restriction(s).

## # 006 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 127.1 and 127.12, 40 CFR 1090.305 as well as from the permittee electing this Synthetic Minor restriction]

The sulfur content of the #2 fuel oil and the #2 fuel oil/biodiesel fuel blend used at this facility for all sources shall not exceed 0.0015%, by weight (15 ppm).

Compliance with this condition also ensures compliance with 25 Pa. Code Section 123.22(a)(2).

#### # 007 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 127.1 and 127.12]

Except for the combustion units incorporated in Source 037 and Source 037A, all #2 fuel oil and diesel fuel fired in any source at this facility shall be virgin fuel to which no reclaimed or waste oil or other waste materials have been added. All fuel oil fired in the combustion units incorporated in Source 037 and Source 037A shall be virgin #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added except that it may contain up to 5% biodiesel fuel.

#### II. TESTING REQUIREMENTS.

# # 008 [25 Pa. Code §139.1]

#### Sampling facilities.

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

# # 009 [25 Pa. Code §139.11]

#### General requirements.

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

## III. MONITORING REQUIREMENTS.

## # 010 [25 Pa. Code §123.43]

#### Measuring techniques

Visible emissions may be measured using either of the following:

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





#### SECTION C. Site Level Requirements

#### # 011 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 40 CFR Section 60.44c(g) and (h)]

The permittee shall obtain a fuel oil certification report from the fuel supplier for each shipment of #2 fuel oil delivered to the facility which accurately identifies the sulfur content of that shipment.

The permittee shall take a representative sample of each shipment of #2 fuel oil delivered to the facility and have it analyzed for sulfur content using an analytical method which is acceptable to the Department.

## IV. RECORDKEEPING REQUIREMENTS.

#### # 012 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain a record of the certifications received and/or the results of the analyses performed for all shipments of #2 fuel oil delivered to the facility.

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

#### [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from each source in the facility each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (2) The amount of carbon monoxide emitted from each source in the facility each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (3) The amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from each source in the facility each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.

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

#### # 014 [25 Pa. Code §135.5]

#### Recordkeeping

The permittee shall maintain such records including computerized records as may be necessary to comply with 25 Pa. Code Sections 135.3 and 135.21. These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

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

#### REPORTING REQUIREMENTS. ٧.

#### # 015 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The permittee shall submit the following records to the Department on a semi-annual basis:

- (1) The amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from each source in the facility each month.
- (2) The amount of carbon monoxide emitted from each source in the facility each month.
- (3) The amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from each source in the facility each month.

The semi-annual reports shall be submitted to the Department no later than March 1 for the immediately-preceding July 1





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

through December 31 six (6) consecutive month period and September 1 for the immediately-preceding January 1 through June 30 six (6) consecutive month period. The reports shall include all supporting documentation used and/or calculations performed in the determination of the reported monthly emissions values.

#### # 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

#### # 017 [25 Pa. Code §127.442]

#### Reporting requirements.

- (a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.
- (c) The report shall describe the following:
- 1. name, permit or authorization number, and location of the facility,
- 2. nature and cause of the malfunction, emergency or incident,
- 3. date and time when the malfunction, emergency or incident was first observed,
- 4. expected duration of excess emissions.
- 5. estimated rate of emissions,
- 6. corrective actions or preventative measures taken.
- (d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.
- (e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.
- (f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.
- (g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

#### # 018 [25 Pa. Code §135.3]

## Reporting

(1) A person who owns or operates a source to which 25 Pa. Code Chapter 135 applies, and who has previously been advised by the Department to submit an annual Air Information Management Systems (AIMS) report, shall submit by March 1 of each year an annual AIMS report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.





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

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- (2) A person who receives initial notification by the Department that an annual AIMS report is necessary shall submit an initial annual AIMS report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.
- (3) A source owner or operator may request an extension of time from the Department for the filing of an annual AIMS report, and the Department may grant the extension for reasonable cause.

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 019 [25 Pa. Code §123.1]

# Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne from any source specified in (1) through (8) in condition #001 herein. These actions shall include, but not limited to, the following:

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

## VII. ADDITIONAL REQUIREMENTS.

#### # 020 [25 Pa. Code §121.7]

## Prohibition of air pollution.

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

#### # 021 [25 Pa. Code §123.31]

# Limitations

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

#### [25 Pa. Code §129.14] # 022

## Open burning operations

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

#### VIII. COMPLIANCE CERTIFICATION.

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

## IX. COMPLIANCE SCHEDULE.

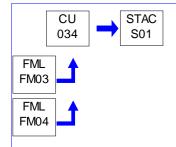
No compliance milestones exist.





Source ID: 034 Source Name: TAMPELLA BOILER

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

# # 001 [25 Pa. Code §123.11]

#### **Combustion units**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source 034 in excess of the following:

- (1) The rate of 0.4 pounds per million Btu of heat input, when the heat input to Source 034 is greater than 2.5 million Btu per hour but less than 50 million Btu per hour.
- (2) The rate determined by the following formula:

 $A = 3.6E^{(-0.56)}$ 

#### where:

A = Allowable emissions in pounds per million Btu of heat input, and

E = Heat input to the combustion unit in millions of Btus per hour, when E is equal to or greater than 50 million Btu per hour but less than 600 million Btu per hour.

# # 002 [25 Pa. Code §123.22]

#### **Combustion units**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from the exhaust of Source 034 in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

## # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

The air contaminant emissions from Source 034 shall not exceed the following limitations:

# While firing natural gas:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 0.04 pounds per million Btu and 3.55 pounds per hour
- (2) carbon monoxide 0.08 pounds per million Btu and 7.10 pounds per hour
- (3) volatile organic compounds 0.004 pounds per million Btu and 0.36 pounds per hour

#### While firing #2 fuel oil:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 0.12 pounds per million Btu and 10.2 pounds per hour
- (2) carbon monoxide: 0.08 pounds per milion Btu and 6.82 pounds per hour
- (3) volatile organic compounds 0.007 pounds per million Btu and 0.60 pounds per hour

#### # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.43c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for particulate matter.







The permittee shall not cause exhaust gases from Source 034 to be discharged into the atmosphere that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. This standard applies at all times except during periods of startup, shutdown or malfunction.

# Fuel Restriction(s).

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source 034 shall only be fired on natural gas or #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The sulfur content of the #2 fuel oil fired in Source 034 shall not exceed 0.0015% (by weight) (15 ppm).

The above limitation has been established at the request of the permittee. Compliance with this permit condition also ensures compliance with 40 CFR Section 60.42c(d).

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

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined operation of Source 034 and Source 038 shall not exceed 8,760 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

# **Throughput Restriction(s).**

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined amount of #2 fuel oil fired in Source 034 and Source 038 shall not exceed 423,000 gallons in any 12 consecutive month period.

The above limitation has been established at the request of the permittee. Compliance with this limitation also ensures compliance with the 890,000 gallon limitation previously established for Source 034 pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, as specified in Operating Permit OP 60-0001.

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined amount of natural gas fired in Source 034 and Source 038 shall not exceed 300 million standard cubic feet (mmscf) in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

#### II. TESTING REQUIREMENTS.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Section 139.3]

(1) By no later than December 31, 2026, and by no later than every four years thereafter (December 31, 2030, December 31, 2034, etc.), but, in each case, not more than one year prior to the specified deadline, the permittee shall perform nitrogen oxides and carbon monoxide stack testing upon Source 034 using test methods and procedures acceptable to the Department. The testing shall be performed while Source 034 is being fired on natural gas, as well as while being fired on





#2 fuel oil. Additionally, Source 034 shall be operated at normal maximum load during any testing required herein.

- (2) At least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one electronic copy shall be sent to the PSIMS Administrator in Central Office. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (3) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Northcentral Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (4) At least 60 Calendar days following the completion of any testing required herein, the permittee shall submit electronic copies of a test report to the Department. This test report shall contain the results of the testing, a description of the test methods and procedures actually used, copies of all raw test data with sample calculations and copies of all process data recorded during testing and operating load calculations. Since the testing is required for the purpose of demonstrating compliance with limitations identified in conditions contained herein, the results of the testing shall be expressed in parts per million by volume, dry basis ate 15% oxygen and in pounds per hour.
- (5) Electronic copies of all submittals, besides notifications, shall be sent to the Northcentral Regional Office Air Quality Program Manager, with deadlines verified. In addition, an electronic copy shall be sent to the PSIMS Administrator in Central Office. Northcentral Regional Office email can be send at: ra-epncstacktesting@pa.gov. Central office email can be send at: ra-epstacktesting@pa.gov.

# # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44c] Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Compliance and performance test methods and procedures for sulfur dioxide.

The permittee shall comply with all applicable compliance and performance test methods and procedures for sulfur dioxide as specified in 40 CFR Part 60, Subpart Dc for Source 034.

#### III. MONITORING REQUIREMENTS.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 034 shall be equipped with instrumentation to measure the usage of natural gas and the usage of #2 fuel oil, respectively.

## IV. RECORDKEEPING REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The number of hours Source 034 is operated each month.
- (2) The amount of natural gas that is fired in Source 034 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.
- (3) The amount of #2 fuel oil that is fired in Source 034 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.
- (4) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source 034 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (5) The total combined amount of carbon monoxide emitted from Source 034 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (6) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source 034 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting





documentation.

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

# 014 [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.

The permittee shall comply with all applicable recordkeeping requirements as specified in 40 CFR Part 60, Subpart Dc for Source 034. All records generated pursuant to this condition shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

# 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall maintain accurate and comprehensive records of the following:

- (1) Copies of each notification and report submitted to comply with Subpart JJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources and all documentation supporting any Initial Notification or Notification of Compliance Status submitted.
- (2) Records to document conformance with the work practice standard required by 40 CFR Section 63.11214. Records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which Source 034 was tuned.
- (3) Records of the occurrence and duration of each malfunction of Source 034, or of the associated air pollution control and monitoring equipment.
- (4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR Section 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

All records must be in a form suitable and readily available for expeditious review in accordance with 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), the permittee shall retain each record for 5 years following the date of each recorded action. The permittee shall retain each record onsite for at least 2 years after the date of each recorded action in accordance with 40 CFR Section 63.10(b)(1). The permittee may retain records off site for the remaining 3 years.

#### REPORTING REQUIREMENTS.

#### #016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit the following records to the Department on a semi-annual basis:

- (1) The number of hours Source 034 is operated each month.
- (2) The amount of natural gas that is fired in Source 034 each month.
- (3) The amount of #2 fuel oil that is fired in Source 034 each month.
- (4) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source 034 each month.
- (5) The total combined amount of carbon monoxide emitted from Source 034 each month.
- (6) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source 034 each month.

The semi-annual reports shall be submitted to the Department no later than March 1 for the immediately-preceding July 1 through December 31 six (6) consecutive month period and September 1 for the immediately-preceding January 1 through June 30 six (6) consecutive month period. The reports shall include all supporting documentation used and/or calculations performed in the determination of the reported monthly emissions values.

# 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.



The submission of all requests, reports, application submittals and other communications required by Subpart Dc of the federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Sections 60.40c through 60.48c, and Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources, 40 CFR Sections 63.11193 through 63.11237, must be made to both the U.S. Environmental Protection Agency and the Department. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10) Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103-2852

and

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

[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.

The permittee shall comply with all applicable reporting requirements as specified in 40 CFR Part 60, Subpart Dc for Source 034.

# 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall prepare, by March 1 of each year, and submit to the Department upon request, an annual compliance certification report for the previous calendar year containing the information specified in subsections (1) through (3) of this condition.

- (1) Company name and address.
- (2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether Source 034 has complied with all the relevant standards and other requirements of this subpart.
- (3) If Source 034 experiences any deviations from the applicable requirements during the reporting period, include a description of the deviations, the time periods during which the deviations occurred, and the corrective actions taken.

All records must be in a form suitable and readily available for expeditious review in accordance with 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), the permittee shall retain each record for 5 years following the date of each recorded action. The permittee shall retain each record onsite for at least 2 years after the date of each recorded action in accordance with 40 CFR Section 63.10(b)(1). The permittee may retain records off site for the remaining 3 years.

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

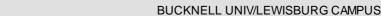
The permittee shall submit all notifications required by 40 CFR Sections 63.7(b): 63.8(e) and (f): 63.9(b) through (e): and 63.9(g) and (h) that apply to Source 038 to the Department by the dates specified in those sections to the Department.

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall submit a Notification of Compliance Status in accordance with 40 CFR Section 63.9(h) no later than July





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19, 2014. In addition to the information required in 40 CFR Section 63.9(h)(2), the notification shall include a certification of compliance, signed by a responsible official, that an initial tune-up of Source 034 had been performed by March 21, 2014 in accordance with condition #024 herein.

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Sections 127.1 and 127.12]

The permittee shall not operate Source 034 at any time without the simultaneous operation of the fluegas recirculation system

#### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]

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

How do I demonstrate continuous compliance with the work practice and management practice standards?

The permittee shall conduct a performance tune-up of Source 034 every 5 years in accordance with subsections (1) through (7) of this condition. The permittee shall conduct the 5-year tune-up while burning the type of fuel that provided the majority of the heat input to Source 034 over the 12 months prior to the tune-up. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 72 months).
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 72 months).
- (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
- (6) Maintain on-site and submit, if requested by the Department, a report containing the information in subsections (6)(a) through (6)(c) of this condition.
- (a) The concentrations of carbon monoxide in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of Source 034.
- (b) A description of any corrective actions taken as a part of the tune-up of Source 034.
- (c) The type and amount of fuel used over the 12 months prior to the 5-year tune-up of Source 034.
- (7) If Source 034 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

# VII. ADDITIONAL REQUIREMENTS.

#### # 024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source 034 is an 88.8 million Btu per hour, natural gas/#2 fuel oil fired Tampella Power boiler equipped with a low nitrogen oxides (low NOx) burner and fluegas recirculation.





# 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Applicability and delegation of authority.

Source 034 is subject to Subpart Dc of the federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 60.40c through 60.48c.

# 026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11194]

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

What is the affected source of this subpart?

Source 034 is subject to Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.11193 through 63.11237.

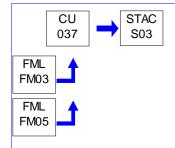
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# **SECTION D.** Source Level Requirements

Source ID: 037 Source Name: SMALL RACT BOILERS & FURNACES

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.22]

#### **Combustion units**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from any combustion unit incorporated in Source 037 in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

# Fuel Restriction(s).

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The combustion units incorporated in Source 037 shall only be fired on propane or virgin #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added except that the fuel oil may contain up to 5% biodiesel fuel.

#### 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.

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 129.91 through 129.95]

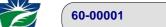
The permittee shall maintain a logbook detailing the dates and types of all service performed on each combustion unit incorporated in Source 037. All records generated pursuant to this condition shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

#### V. REPORTING REQUIREMENTS.

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The submission of all requests, reports, applications submittals and other communications required by Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources, 40 CFR Sections 63.11193 through 63.11237, must be made to both the Department of Environmental Protection





and the Environmental Protection Agency. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10)

Four Penn Center, 1600 John F. Kennedy Boulevard,

Philadelphia, Pennsylvania 19103-2852

and

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

#### VI. WORK PRACTICE REQUIREMENTS.

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 129.93(c)]

The permittee shall maintain and operate each combustion unit incorporated in Source 037 in accordance with the manufacturer's specifications.

#### ADDITIONAL REQUIREMENTS.

#### # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 037 incorporates the following small boilers and furnaces:

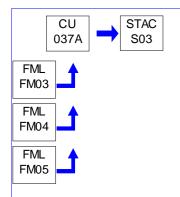
- (1) Farm House East; #2 oil-fired; heat input capacity of 0.322 million Btu per hour.
- (1a) Farm House West; #2 oil-fired; heat input capacity of 0.280 million Btu per hour.
- (2) Malcom St. 5; #2 oil-fired; heat input capacity of 0.175 million Btu per hour.
- (3) Greenhouse; propane-fired; heat input capacity of 0.110 million Btu per hour.
- (4) Greenhouse; propane-fired; heat input capacity of 0.100 million Btu per hour.
- (5) Sculpture Bldg.; propane-fired; heat input capacity of 0.200 million Btu per hour.
- (6) Sculpture Bldg.; propane-fired; heat input capacity of 0.200 million Btu per hour.





Source ID: 037A Source Name: SMALL NON-RACT BOILERS & FURNACES

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.22]

#### **Combustion units**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from any combustion unit incorporated in Source 037A in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

# Fuel Restriction(s).

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The combustion units incorporated in Source 037A shall only be fired on natural gas, propane or virgin #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added except that the fuel oil may contain up to 5% biodiesel fuel.

## 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.

# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall maintain accurate and comprehensive records of the following for the Animal Behavior Lab boiler incorporated in Source 037A:

- (1) Copies of each notification and report submitted to comply with Subpart JJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources and all documentation supporting any Initial Notification or Notification of Compliance Status submitted.
- (2) Records to document conformance with the work practice standard required by 40 CFR Section 63.11214. Records must





identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the subject boiler was tuned.

- (3) Records of the occurrence and duration of each malfunction of any of the subject boiler, or of the associated air pollution control and monitoring equipment.
- (4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR Section 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

All records must be in a form suitable and readily available for expeditious review in accordance with 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), the permittee shall retain each record for 5 years following the date of each recorded action. The permittee shall retain each record onsite for at least 2 years after the date of each recorded action in accordance with 40 CFR Section 63.10(b)(1). The permittee may retain records off site for the remaining 3 years.

#### V. REPORTING REQUIREMENTS.

## # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The submission of all requests, reports, applications submittals and other communications required by Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources, 40 CFR Sections 63.11193 through 63.11237, must be made to both the Department of Environmental Protection and the Environmental Protection Agency. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10) Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103-2852

and

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

#### # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

# What are my notification, reporting, and recordkeeping requirements?

The permittee shall prepare, by March 1 of each year, and submit to the Department upon request, an annual compliance certification report for the previous calendar year containing the information specified in subsections (1) through (3) of this condition.

- (1) Company name and address.
- (2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the Animal Behavior Lab boiler incorporated in Source 037A has complied with all the relevant standards and other requirements of this subpart.

  (3) If the Animal Behavior Lab boiler incorporated in Source 037A experiences any deviations from the applicable requirements during the reporting period, include a description of the deviations, the time periods during which the deviations occurred, and the corrective actions taken.

All records must be in a form suitable and readily available for expeditious review in accordance with 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), the permittee shall retain each record for 5 years following the date of each recorded action. The permittee shall retain each record onsite for at least 2 years after the date of each recorded action in accordance with 40 CFR Section 63.10(b)(1). The permittee may retain records off site for the remaining 3 years.





# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall submit all notifications required by 40 CFR Sections 63.7(b): 63.8(e) and (f); 63.9(b) through (e); and 63.9(g) and (h) that apply to the Animal Behavior Lab boiler incorporated in Source 037A to the Department by the dates specified in those sections to the Department.

#### VI. WORK PRACTICE REQUIREMENTS.

## # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]

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

How do I demonstrate continuous compliance with the work practice and management practice standards?

The permittee shall conduct a performance tune-up of the Animal Behavior Lab boiler incorporated in Source 037A every 5 years in accordance with subsections (1) through (7) of this condition. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 72 months).
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 72 months).
- (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
- (6) Maintain on-site and submit, if requested by the Department, a report containing the information in subsections (6)(a) through (6)(c) of this condition.
- (a) The concentrations of carbon monoxide in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the Animal Behavior Lab boiler incorporated in Source 037A.
- (b) A description of any corrective actions taken as a part of the tune-up of the Animal Behavior Lab boiler incorporated in Source 037A.
- (c) The type and amount of fuel used over the 12 months prior to the 5-year tune-up of the Animal Behavior Lab boiler incorporated in Source 037A.
- (7) If the Animal Behavior Lab boiler incorporated in Source 037A is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup of the subject boiler.

#### VII. ADDITIONAL REQUIREMENTS.

## # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 037A includes the following small boilers and furnaces:

- (1) Clauss House;0.140 million Btu per hour, #2 oil-fired Weil-McLean boiler.
- (2) Clauss House; #2 oil-fired; heat input capacity of 0.151 million Btu per hour.
- (3) St. Geo St. 632; #2 oil-fired; heat input capacity of 0.364million Btu per hour.
- (4) Spratt House; natural gas-fired; heat input capacity 0.299 million Btu per hour.
- (5) Biology Building; 1.075 million Btu per hour, natural gas-fired Parker model 103-25 boiler.



- (6) Kindig House; 0.147 million Btu per hour, #2 oil-fired Burnham model PV-89-ST boiler.
- (7) SAE Fraternity; 1.827 million Btu per hour, natural gas-fired Smith model 28A-SW-06 boiler.
- (8) Reitz House; 1.05 million Btu per hour, #2 oil-fired Armstrong model LBF80C84 furnace.
- (9) Lambda Chi Alpha; two 0.399 million Btu per hour, natural gas-fired water heaters.
- (11) Lambda Chi Alpha; 0.22 million Btu per hour, natural gas-fired boiler.
- (12) Kappa Delta Rho; two 0.399 million Btu per hour, natural gas-fired water heaters.
- (13) Kappa Delta Rho; 0.22 million Btu per hour, natural gas-fired boiler.
- (14) Civil Engineering Test Building; three 0.06 million Btu per hour, propane-fired Reznor model FE75 space heaters.
- (15) Golf Course Maintenance Shop; 0.60 million Btu per hour, propane-fired York Diamond model EMJM510005 furnace.
- (16) Golf Course Maintenance Shop; 0.08 million Btu per hour, propane-fired Ambirad model PT80 space heater.
- (17) Instructional Golf Facility; four 0.025 million Btu per hour, propane-fired space heaters.
- (18) Instructional Golf Facility; two 0.03 million Btu per hour, propane-fired space heaters.
- (19) Cooley Hall; 0.299 MMBtu/hr, natural gas-fired Weil McClain boiler
- (20) Kappa Sigma; 0.787 MMBtu/hr, natural gas-fired Weil McClain boiler
- (21) Bucknell Hall; 0.299 MMBtu/hr, natural gas-fired Weil McClain Ultra 299 boiler
- (22) Animal Behavior Lab; 1.642 MMBtu/hr, #2 oil-fired Burnham V909A boiler
- (23) President's House: 0.110 MMBtu/hr, natural gas-fired, Ingersoll Rand model TUH1D120A960IC furnace
- (24) President's House; 0.180 MMBtu/hr, natural gas-fired, AO Smith model ATO-340H-N water heater
- (25) President's House; 0.180 MMBtu/hr, natural gas-fired, AO Smith model ATO-340H-N water heater
- (26) 23 University Avenue; 0.199 MMBtu/hr, natural gas-fired, Takagi model AT-H3-DV-D water heater
- (27) 23 University Avenue; 0.199 MMBtu/hr, natural gas-fired, Takagi model AT-H3-DV-D water heater
- (28) Affinity Houses 7 & 8; 0.399 MMBtu/hr, natural gas-fired, HTP model EP-399NVWH water heater
- (29) Affinity Houses 7 & 8; 0.399 MMBtu/hr, natural gas-fired, HTP model EP-399NVWH water heater
- (30) Affinity Houses 7 & 8; 0.399 MMBtu/hr, natural gas-fired, HTP model EP-399NVWH water heater
- (31) Affinity Houses 7 & 8; 0.399 MMBtu/hr, natural gas-fired, HTP model EP-399NWH water heater
- (32) Affinity Houses 7 & 8; 0.399 MMBtu/hr, natural gas-fired, HTP model EFT-399 boiler
- (33) Affinity Houses 7 & 8; 0.399 MMBtu/hr, natural gas-fired, HTP model EFT-399 boiler
- (34) Galloway House; 0.199 MMBtu/hr, natural gas-fired Rinnai REU-KB3237FFUDUS water heater
- (35) Galloway House; 0.199 MMBtu/hr, natural gas-fired Rinnai REU-KB3237FFUDUS water heater
- (36) Galloway House; 0.155 MMBtu/hr, natural gas-fired Weil McClain model WM97+155 boiler
- (37) Galloway House; 0.155 MMBtu/hr, natural gas-fired Weil McClain model WM97+155 boiler
- (38) 64 University Avenue (Kappa Sigma) Left; 0.199 MMBtu/hr, natural gas-fired A.O. Smith Model AT-H3-DV-N water heater
- (39) 64 University Avenue (Kappa Sigma) Right; 0.199 MMBtu/hr, natural gas-fired A.O. Smith Model AT-H3-DV-N water heater
- (40) 28 University Avenue; 0.23 MMBtu/hr, natural gas-fired, Weil-McLain Model Ultra 230 hot water boiler
- (41) 28 University Avenue; 0.16 MMBtu/hr, natural gas-fired, Takagi Model AT-H3J-DV-N water heater
- (42) 20 University Avenue; two (2) 0.080 MMBtu/hr natural gas-fired furnaces and one (1) 0.040 MMBtu/hr natural gas-fired
- (43) Recycling Building; 0.10 MMBtu/hr propane-fired space heater.
- (44) 63 University Avenue; 0.132 MMBtu/hr natural gas-fired furnace.
- (45) Holmes Hall; two (2) 2.0 MMBtu/hr natural gas-fired boilers.

#### [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11194]

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

What is the affected source of this subpart?

The Animal Behavior Lab boiler incorporated in Source 037A is subject to Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.11193 through 63.11237.



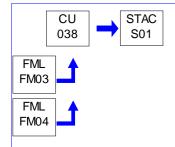
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# **SECTION D.** Source Level Requirements

Source ID: 038 Source Name: INDECK BOILER

Source Capacity/Throughput:



#### I. RESTRICTIONS.

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

# # 001 [25 Pa. Code §123.11]

#### **Combustion units**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source 038 in excess of the following:

- (1) The rate of 0.4 pounds per million Btu of heat input, when the heat input to Source 038 is greater than 2.5 million Btu per hour but less than 50 million Btu per hour.
- (2) The rate determined by the following formula:

 $A = 3.6E^{(-0.56)}$ 

#### where:

A = Allowable emissions in pounds per million Btu of heat input, and

E = Heat input to the combustion unit in millions of Btus per hour, when E is equal to or greater than 50 million Btu per hour but less than 600 million Btu per hour.

# # 002 [25 Pa. Code §123.22]

#### **Combustion units**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from Source 038 in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

## # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

The air contaminant emissions from Source 038 shall not exceed the following limitations:

# While firing natural gas:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 0.04 pounds per million Btu and 3.41 pounds per hour
- (2) carbon monoxide 0.08 pounds per million Btu and 6.82 pounds per hour
- (3) volatile organic compounds 0.003 pounds per million Btu and 0.26 pounds per hour

## While firing #2 fuel oil:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 0.10 pounds per million Btu and 8.15 pounds per hour
- (2) carbon monoxide 0.08 pounds per million Btu and 6.52 pounds per hour
- (3) volatile organic compounds 0.003 pounds per million Btu and 0.24 pounds per hour

# # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.43c]

Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Standard for particulate matter.

The permittee shall not cause exhaust gases from Source 038 to be discharged into the atmosphere that exhibit greater







than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. This standard applies at all times except during periods of startup, shutdown or malfunction.

# Fuel Restriction(s).

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source 038 shall only be fired on natural gas or #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The sulfur content of the #2 fuel oil fired in Source 038 shall not exceed 0.0015% (by weight) (15 ppm).

The above limitation has been established at the request of the permittee. Compliance with this permit condition also ensures compliance with 40 CFR Section 60.42c(d).

## Operation Hours Restriction(s).

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined operation of Source 034 and Source 038 shall not exceed 8,760 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

# Throughput Restriction(s).

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined amount of #2 fuel oil fired in Source 034 and Source 038 shall not exceed 423,000 gallons in any 12 consecutive month period.

The above limitation has been established at the request of the permittee. Compliance with this limitation also ensures compliance with the 850,000 gallon limitation previously established for Source 038 pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12, as specified in Operating Permit OP 60-0001.

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The total combined amount of natural gas fired in Source 034 and Source 038 shall not exceed 300 million standard cubic feet (mmscf) in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

#### II. TESTING REQUIREMENTS.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Section 139.3]

(1) By no later than December 31, 2026, and by no later than every four years thereafter (December 31, 2030, December 31, 2034, etc.), but, in each case, not more than one year prior to the specified deadline, the permittee shall perform nitrogen oxides and carbon monoxide stack testing upon Source 038 using test methods and procedures acceptable to the Department. The testing shall be performed while Source 038 is being fired on natural gas, as well as while being fired on





#2 fuel oil. Additionally, Source 038 shall be operated at normal maximum load during any testing required herein.

- (2) At least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one electronic copy shall be sent to the PSIMS Administrator in Central Office. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (3) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Northcentral Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (4) At least 60 Calendar days following the completion of any testing required herein, the permittee shall submit electronic copies of a test report to the Department. This test report shall contain the results of the testing, a description of the test methods and procedures actually used, copies of all raw test data with sample calculations and copies of all process data recorded during testing and operating load calculations. Since the testing is required for the purpose of demonstrating compliance with limitations identified in conditions contained herein, the results of the testing shall be expressed in parts per million by volume, dry basis ate 15% oxygen and in pounds per hour.
- (5) Electronic copies of all submittals, besides notifications, shall be sent to the Northcentral Regional Office Air Quality Program Manager, with deadlines verified. In addition, an electronic copy shall be sent to the PSIMS Administrator in Central Office. Northcentral Regional Office email can be send at: ra-epncstacktesting@pa.gov. Central office email can be send at: ra-epstacktesting@pa.gov.

# # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44c] Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Compliance and performance test methods and procedures for sulfur dioxide.

The permittee shall comply with all applicable compliance and performance test methods and procedures for sulfur dioxide as specified in 40 CFR Part 60, Subpart Dc for Source 038.

#### III. MONITORING REQUIREMENTS.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 038 shall be equipped with instrumentation to measure the usage of natural gas and the usage of #2 fuel oil, respectively.

## IV. RECORDKEEPING REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The number of hours Source 038 is operated each month.
- (2) The amount of natural gas that is fired in Source 038 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.
- (3) The amount of #2 fuel oil that is fired in Source 038 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.
- (4) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source 038 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (5) The total combined amount of carbon monoxide emitted from Source 038 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (6) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source 038 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting





documentation.

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

# 014 [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.

The permittee shall comply with all applicable recordkeeping requirements as specified in 40 CFR Part 60, Subpart Dc for Source 038. All records generated pursuant to this condition shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

# 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall maintain accurate and comprehensive records of the following:

- (1) Copies of each notification and report submitted to comply with Subpart JJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources and all documentation supporting any Initial Notification or Notification of Compliance Status submitted.
- (2) Records to document conformance with the work practice standard required by 40 CFR Section 63.11214. Records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which Source 038 was tuned.
- (3) Records of the occurrence and duration of each malfunction of Source 038, or of the associated air pollution control and monitoring equipment.
- (4) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR Section 63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

All records must be in a form suitable and readily available for expeditious review in accordance with 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), the permittee shall retain each record for 5 years following the date of each recorded action. The permittee shall retain each record onsite for at least 2 years after the date of each recorded action in accordance with 40 CFR Section 63.10(b)(1). The permittee may retain records off site for the remaining 3 years.

#### REPORTING REQUIREMENTS.

#### #016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The submission of all requests, reports, application submittals and other communications required by Subpart Dc of the federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Sections 60.40c through 60.48c, and Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers Area Sources, 40 CFR Sections 63.11193 through 63.11237, must be made to both the U.S. Environmental Protection Agency and the Department. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10)

Four Penn Center, 1600 John F. Kennedy Boulevard,

Philadelphia, Pennsylvania 19103-2852

and

Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101

Williamsport, PA 17701-6448





## # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit the following records to the Department on a semi-annual basis:

- (1) The number of hours Source 038 is operated each month.
- (2) The amount of natural gas that is fired in Source 038 each month.
- (3) The amount of #2 fuel oil that is fired in Source 038 each month.
- (4) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source 038 each month.
- (5) The total combined amount of carbon monoxide emitted from Source 038 each month.
- (6) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source 038 each month.

The semi-annual reports shall be submitted to the Department no later than March 1 for the immediately-preceding July 1 through December 31 six (6) consecutive month period and September 1 for the immediately-preceding January 1 through June 30 six (6) consecutive month period. The reports shall include all supporting documentation used and/or calculations performed in the determination of the reported monthly emissions values.

# 018 [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.

The permittee shall comply with all applicable reporting requirements as specified in 40 CFR Part 60, Subpart Dc for Source 038.

# 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall prepare, by March 1 of each year, and submit to the Department upon request, an annual compliance certification report for the previous calendar year containing the information specified in subsections (1) through (3) of this condition.

- (1) Company name and address.
- (2) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether Source 038 has complied with all the relevant standards and other requirements of this subpart.
- (3) If Source 038 experiences any deviations from the applicable requirements during the reporting period, include a description of the deviations, the time periods during which the deviations occurred, and the corrective actions taken.

All records must be in a form suitable and readily available for expeditious review in accordance with 40 CFR Section 63.10(b)(1). As specified in 40 CFR Section 63.10(b)(1), the permittee shall retain each record for 5 years following the date of each recorded action. The permittee shall retain each record onsite for at least 2 years after the date of each recorded action in accordance with 40 CFR Section 63.10(b)(1). The permittee may retain records off site for the remaining 3 years.

# 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall submit all notifications required by 40 CFR Sections 63.7(b): 63.8(e) and (f); 63.9(b) through (e); and 63.9(g) and (h) that apply to Source 038 to the Department by the dates specified in those sections to the Department.

# 021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]

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

What are my notification, reporting, and recordkeeping requirements?

The permittee shall submit a Notification of Compliance Status in accordance with 40 CFR Section 63.9(h) no later than July 19, 2014. In addition to the information required in 40 CFR Section 63.9(h)(2), the notification shall include a certification of





compliance, signed by a responsible official, that an initial tune-up of Source 038 had been performed by March 21, 2014 in accordance with condition #024 herein.

### VI. WORK PRACTICE REQUIREMENTS.

#### # 022 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

The permittee shall not operate Source 038 at any time without the simultaneous operation of the fluegas recirculation system.

#### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]

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

How do I demonstrate continuous compliance with the work practice and management practice standards?

The permittee shall conduct a performance tune-up of Source 038 every 5 years in accordance with subsections (1) through (7) of this condition. The permittee shall conduct the 5-year tune-up while burning the type of fuel that provided the majority of the heat input to Source 038 over the 12 months prior to the tune-up. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 72 months).
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 72 months).
- (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).
- (6) Maintain on-site and submit, if requested by the Department, a report containing the information in subsections (6)(a) through (6)(c) of this condition.
- (a) The concentrations of carbon monoxide in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of Source 038.
- (b) A description of any corrective actions taken as a part of the tune-up of Source 038.
- (c) The type and amount of fuel used over the 12 months prior to the 5-year tune-up of Source 038.
- (7) If Source 038 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

## VII. ADDITIONAL REQUIREMENTS.

#### # 024 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source 038 is an 85.2 million Btu per hour, natural gas/#2 oil-fired Indeck boiler equipped with a low nitrogen oxides (low NOx) burner and fluegas recirculation.





# 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Applicability and delegation of authority.

Source 038 is subject to Subpart Dc of the federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 60.40c through 60.48c.

# 026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11194]

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

What is the affected source of this subpart?

Source 038 is subject to Subpart JJJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Industrial Boilers Area Sources. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.11193 through 63.11237.



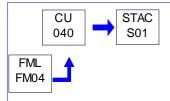
## 60-00001



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

Source ID: 040 Source Name: HRSG WITH DUCT BURNER

Source Capacity/Throughput:



### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.11]

### **Combustion units**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source 040 in excess of the following:

- (1) The rate of 0.4 pounds per million Btu of heat input, when the heat input to Source 040 is greater than 2.5 million Btu per hour but less than 50 million Btu per hour.
- (2) The rate determined by the following formula:

 $A = 3.6E^{(-0.56)}$ 

where:

A = Allowable emissions in pounds per million Btu of heat input, and

E = Heat input to the combustion unit in millions of Btus per hour, when E is equal to or greater than 50 million Btu per hour but less than 600 million Btu per hour.

## # 002 [25 Pa. Code §123.22]

## **Combustion units**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from Source 040 in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

### # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The air contaminant emissions from Source 040 shall not exceed the following limitations:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 0.10 pounds per million Btu and 4.80 pounds per hour
- (2) carbon monoxide 0.10 pounds per million Btu and 4.80 pounds per hour
- (3) volatile organic compounds 0.003 pounds per million Btu and 0.15 pounds per hour

## Fuel Restriction(s).

### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 040 shall only be fired on natural gas.

## Throughput Restriction(s).

## # 005 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The total amount of natural gas fired in Source 040 shall not exceed 100 million standard cubic feet (mmscf) in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.







### 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.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 040 shall be equipped with instrumentation to measure the usage of natural gas.

### IV. RECORDKEEPING REQUIREMENTS.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The amount of natural gas that is fired in Source 040 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.
- (2) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source 040 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (3) The total combined amount of carbon monoxide emitted from Source 040 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (4) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source 040 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.

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

# 008 [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.

The permittee shall comply with all applicable recordkeeping requirements as specified in 40 CFR Part 60, Subpart Dc for Source 040. All records generated pursuant to this condition shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

## V. REPORTING REQUIREMENTS.

# 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit the following records to the Department on a semi-annual basis:

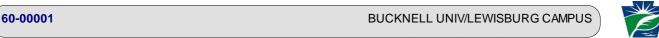
- (1) The amount of natural gas that is fired in Source 040 each month.
- (2) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source 040 each month.
- (3) The total combined amount of carbon monoxide emitted from Source 040 each month.
- (4) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source 040 each month.

The semi-annual reports shall be submitted to the Department no later than March 1 for the immediately-preceding July 1 through December 31 six (6) consecutive month period and September 1 for the immediately-preceding January 1 through June 30 six (6) consecutive month period. The reports shall include all supporting documentation used and/or calculations performed in the determination of the reported monthly emissions values.

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

**Subpart A - General Provisions** 

Address.



The submission of all requests, reports, application submittals and other communications required by the Subpart Dc of the federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Sections 60.40c through 60.48c, must be made to both the U.S. Environmental Protection Agency and the Department. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10) Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103-2852

and

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

### VI. WORK PRACTICE REQUIREMENTS.

# 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 040 shall only be operated with the simultaneous operation of Source P101.

### VII. ADDITIONAL REQUIREMENTS.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source 040 is an Energy Recovery International 70,000 pounds per hour (steam output) heat recovery steam generator equipped with a 48 million Btu per hour, natural gas-fired duct burner.

# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Applicability and delegation of authority.

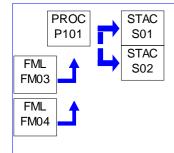
Source 040 is subject to Subpart Dc of the federal Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 60.40c through 60.48c.





Source ID: P101 Source Name: COMBUSTION TURBINE

Source Capacity/Throughput:



### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.13]

### **Processes**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source P101 in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot of effluent gas volume.

## # 002 [25 Pa. Code §123.21]

### **General**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from Source P101 in such a manner that the concentration of the sulfur oxides in the effluent gas exceeds 500 parts per million, by volume, dry basis.

## # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

The air contaminant emissions from Source P101 shall not exceed the following limitations:

### When firing natural gas:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 25 parts per million by volume, dry basis at 15% oxygen, and 6.58 pounds per hour
- $(2)\ carbon\ monoxide\ -\ 50\ parts\ per\ million\ by\ volume,\ dry\ basis\ at\ 15\%\ oxygen,\ and\ 8.02\ pounds\ per\ hour$
- (3) volatile organic compounds (expressed as methane) 25 parts per million by volume, dry basis at 15% oxygen, and 2.30 pounds per hour
- (4) sulfur oxides, expressed as sulfur dioxide (SO2) 0.09 pounds per hour
- (5) particulate matter/PM-10 (particulate matter with an aerodynamic diameter of 10 microns or less) 0.383 pounds per hour

## When firing #2 fuel oil:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 90 parts per million by volume, dry basis at 15% oxygen, and 22.04 pounds per hour
- (2) carbon monoxide 50 parts per million by volume, dry basis at 15% oxygen, and 6.99 pounds per hour
- (3) volatile organic compounds (expressed as methane) 25 parts per million by volume, dry basis at 15% oxygen, and 2.00 pounds per hour
- (4) sulfur oxides, expressed as sulfur dioxide (SO2) 14.12 pounds per hour
- (5) particulate matter/PM-10 (particulate matter with an aerodynamic diameter of 10 microns or less) 0.684 pounds per hour

Compliance with this permit condition also ensures compliance with 40 CFR Section 60.332(a)(2).





# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

The air contaminant emissions from Source P101 shall not exceed the following limitations:

- (1) nitrogen oxides, expressed as nitrogen dioxide (NO2) 39.95 tons in any 12 consecutive month period
- (2) carbon monoxide 35.13 tons in any 12 consecutive month period
- (3) volatile organic compounds (expressed as methane) 10.07 tons in any 12 consecutive month period
- (4) sulfur oxides, expressed as sulfur dioxide (SO2) 10.50 tons in any 12 consecutive month period
- (5) particulate matter/PM-10 (particulate matter with an aerodynamic diameter of 10 microns or less) 1.89 tons in any 12 consecutive month period
- (6) hazardous air pollutants 0.79 tons in any 12 consecutive month period
- (7) formaldehyde 0.67 tons in any 12 consecutive month period

# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.333]

Subpart GG - Standards of Performance for Stationary Gas Turbines

Standard for sulfur dioxide.

Source P101 shall not be fired on natural gas which contains sulfur in excess of 0.8 percent (by weight).

## Fuel Restriction(s).

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source P101 shall only be fired on natural gas or #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added.

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

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source P101 shall not be operated more than 1,440 hours in any 12 consecutive month period while being fired on #2 fuel oil.

### II. TESTING REQUIREMENTS.

# 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from 25 Pa. Code Section 139.3]

- (1) By no later than December 31, 2026, and by no later than every four years thereafter (December 31, 2030, December 31, 2034, etc.), but, in each case, not more than one year prior to the specified deadline, the permittee shall perform nitrogen oxides and carbon monoxide stack testing upon Source P101 using test methods and procedures acceptable to the Department. The testing shall be performed while Source P101 is being fired on natural gas, as well as while being fired on #2 fuel oil. Additionally, Source P101 shall be operated at normal maximum load during any testing required herein.
- (2) At least 90 calendar days prior to commencing a EPA reference method testing program, a test protocol shall be submitted to the Department for review and approval. One electronic copy shall be sent to the Northcentral Regional Office Air Quality Program Manager and one electronic copy shall be sent to the PSIMS Administrator in Central Office. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.





- (3) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Northcentral Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (4) At least 60 Calendar days following the completion of any testing required herein, the permittee shall submit electronic copies of a test report to the Department. This test report shall contain the results of the testing, a description of the test methods and procedures actually used, copies of all raw test data with sample calculations and copies of all process data recorded during testing and operating load calculations. Since the testing is required for the purpose of demonstrating compliance with limitations identified in conditions contained herein, the results of the testing shall be expressed in parts per million by volume, dry basis ate 15% oxygen and in pounds per hour.
- (5) Electronic copies of all submittals, besides notifications, shall be sent to the Northcentral Regional Office Air Quality Program Manager, with deadlines verified. In addition, an electronic copy shall be sent to the PSIMS Administrator in Central Office. Northcentral Regional Office email can be send at: ra-epncstacktesting@pa.gov. Central office email can be send at: ra-epstacktesting@pa.gov.

#### # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.335]

Subpart GG - Standards of Performance for Stationary Gas Turbines

Test methods and procedures.

The permittee shall determine compliance with the sulfur content standard as follows: ASTM D 1072-80, D3031-81, D 4084-82 or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference--see 40 CFR Section 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

The methods specified above may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor or any other qualified agency.

#### MONITORING REQUIREMENTS. III.

#### # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P101 shall be equipped with instrumentation to measure the usage of natural gas and the usage of #2 fuel oil, respectively.

# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.334]

Subpart GG - Standards of Performance for Stationary Gas Turbines

Monitoring of operations.

The permittee shall develop custom schedules for determination of the sulfur content based on the design and operation of Source P101 and the characteristics of the fuel supply. This custom schedule shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR Section 60.334(b).

## IV. RECORDKEEPING REQUIREMENTS.

#### # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The number of hours Source P101 is operated each month while firing natural gas.
- (2) The number of hours Source P101 is operated each month while firing #2 fuel oil.
- (3) The amount of natural gas that is fired in Source P101 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.
- (4) The amount of #2 fuel oil that is fired in Source P101 each month. These fuel usage records shall be maintained on a daily basis and organized into a monthly format.







- (5) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source P101 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (6) The total combined amount of carbon monoxide emitted from Source P101 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (7) The total combined amount of volatile organic compounds (expressed as methane) emitted from Source P101 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.
- (8) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source P101 each month, as well as a copy of the calculations performed to determine the respective emission value and a copy of all supporting documentation.

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

### V. REPORTING REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall submit the following records to the Department on a semi-annual basis:

- (1) The number of hours Source P101 is operated each month while firing natural gas.
- (2) The number of hours Source P101 is operated each month while firing #2 fuel oil.
- (3) The amount of natural gas that is fired in Source P101 each month.
- (4) The amount of #2 fuel oil that is fired in Source P101 each month.
- (5) The total combined amount of nitrogen oxides, expressed as nitrogen dioxide (NO2), emitted from Source P101 each month.
- (6) The total combined amount of carbon monoxide emitted from Source P101 each month.
- (7) The total combined amount of volatile organic compounds (expressed as methane) emitted from Source P101 each month.
- (8) The total combined amount of sulfur oxides, expressed as sulfur dioxide (SO2), emitted from Source P101 each month.

The semi-annual reports shall be submitted to the Department no later than March 1 for the immediately-preceding July 1 through December 31 six (6) consecutive month period and September 1 for the immediately-preceding January 1 through June 30 six (6) consecutive month period. The reports shall include all supporting documentation used and/or calculations performed in the determination of the reported monthly emissions values.

## # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

### **Subpart A - General Provisions**

## Address.

The submission of all requests, reports, application submittals, and other communications required by Subpart GG of the federal Standards of Performance for Stationary Gas Turbines, 40 CFR Sections 60.330 through 60.335, must be made to both the U.S. Environmental Protection Agency and the Department. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10) Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103-2852

and

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







### VI. WORK PRACTICE REQUIREMENTS.

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

### VII. ADDITIONAL REQUIREMENTS.

# 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source P101 is a 5.5 megawatt natural gas/#2 fuel oil-fired Solar Taurus model T-7300S combustion turbine equipped with Solar "SoLoNOx" low nitrogen oxides (low NOx) combustors.

# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.330]

Subpart GG - Standards of Performance for Stationary Gas Turbines

Applicability and designation of affected facility.

Source P101 is subject to Subpart GG of the federal Standards of Performance for Stationary Gas Turbines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 60.330 through 60.335.



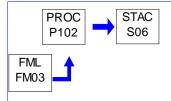




Source ID: P102 Source Name: EMERGENCY GENERATOR ENGINE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: ZZZZ



## I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.13]

### **Processes**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source P102 in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot of effluent gas volume.

# 002 [25 Pa. Code §123.21]

### **General**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from Source P102 in such a manner that the concentration of the sulfur oxides in the effluent gas exceeds 500 parts per million, by volume, dry basis.

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. code Sections 127.1 and 127.12]

Source P102 shall not emit nitrogen oxides, expressed as nitrogen dioxide (NO2), in excess of 12.05 pounds per hour.

## Fuel Restriction(s).

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 127.1 and 127.12]

Source P102 shall be fired only on diesel fuel to which no reclaimed or waste oil or other waste materials have been added.

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

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P102 shall not be operated more than 200 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee. Compliance with this limitation also ensures compliance with the 500 hours in any 12 consecutive month period operating limitation previously established for Source P102 pursuant to the best available technology provisions of 25 Pa. Code Sections 127.1 and 127.12.

### 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).





#### MONITORING REQUIREMENTS. III.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P102 shall be equipped with instrumentation to measure the usage of diesel fuel.

## IV. RECORDKEEPING REQUIREMENTS.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The number of hours Source P102 is operated each month.
- (2) The amount of diesel fuel that is fired in Source P102 each month.

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

### 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.

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

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

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

- (a) The permittee shall:
- (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

#### # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable monitoring requirements specified in 40 CFR Section 63.6625(i).

(i) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d in 40 CFR Part 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d in 40 CFR Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.







The permittee shall provide written notification to the Department stating your intent to utilize the oil analysis program prior to utilizing the oil analysis program.

### VII. ADDITIONAL REQUIREMENTS.

# 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P102 is a 500 kilowatt emergency generator equipped with a 749 horsepower Caterpillar model 3412C diesel-fired engine.

# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

What parts of my plant does this subpart cover?

Source 102 is subject to Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.6580 through 63.6675.

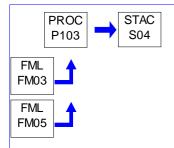




Source ID: P103 Source Name: RACT EMERGENCY GENERATORS ENGINES & FIRE PUMP ENGINE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: ZZZZ



### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.13]

### **Processes**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from any emergency generator or fire pump incorporated in Source P103 in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot of effluent gas volume.

# 002 [25 Pa. Code §123.21]

## **General**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from any emergency generator or fire pump incorporated in Source P103 in such a manner that the concentration of the sulfur oxides in the effluent gas exceeds 500 parts per million, by volume, dry basis.

## Fuel Restriction(s).

# 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency generators engines and fire pump engine incorporated in Source P103 shall only be fired on propane or #2 fuel oil to which no reclaimed or waste oil or other waste materials have been added.

## Operation Hours Restriction(s).

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each emergency generator engine and fire pump engine incorporated in Source P103 shall not be operated more than 200 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee. Compliance with this limitation also ensures compliance with the 500 hours in any 12 consecutive month period operating limitation previously established for Source P103 pursuant to the reasonably available control technology provisions of 25 Pa. Code Sections 129.91 through 129.95.

### 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.

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code Sections 129.91 through 129.95]

The permittee shall maintain accurate and comprehensive records of the number of hours each emergency generator engine and fire pump engine incorporated in Source P103 operates each month. These records shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

### 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.

# 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall maintain and operate each emergency generator engine and fire pump engine incorporated in Source P103 in accordance with manufacturer's specifications.

# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

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

- (a) For the compression-ignition engines incorporated in this source, the permittee shall:
- (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

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

- (a) For the spark-ignition engines incorporated in this source, the permittee shall:
- (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

## # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable monitoring requirements specified in 40 CFR Section 63.6625(i).



(i) For the compression-ignition engines, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d in 40 CFR Part 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d in 40 CFR Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

The permittee shall provide written notification to the Department stating your intent to utilize the oil analysis program prior to utilizing the oil analysis program.

### # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable maintenance requirements specified in 40 CFR Section 63.6625(j).

(j) For the spark-ignition engines, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c in 40 CFR Part 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c in 40 CFR Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

The permittee shall provide written notification to the Department stating your intent to utilize the oil analysis program prior to utilizing the oil analysis program.

### VII. ADDITIONAL REQUIREMENTS.

### # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P103 incorporates the following emergency generators engines and fire pump engine:

- (1) Library 127.4 horsepower (95 kilowatt), propane-fired emergency generator engine.
- (2) Chemistry Building 335.3 horsepower (250 kilowatt), #2 fuel oil-fired emergency generator engine.
- (4) Weis Center 40.2 horsepower (30 kilowatt), propane-fired emergency generator engine.
- (5) Smith Hall 26.8 horsepower (20 kilowatt), propane-fired emergency generator engine.
- (6) Roberts Hall 33.5 horsepower (25 kilowatt), propane-fired emergency generator engine.
- (7) Physical Plant (ph3) 207.9 horsepower (155 kilowatt), #2 fuel oil-fired emergency generator engine.
- (8) Taylor Hall 62 horsepower, #2 fuel oil-fired fire pump engine.



# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

What parts of my plant does this subpart cover?

The emergency stationary reciprocating internal combustion engines incorporated in Source 103 are subject to Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.6580 through 63.6675.

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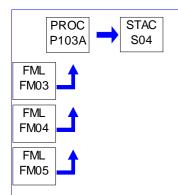


## **SECTION D.** Source Level Requirements

Source ID: P103A Source Name: NON-RACT EMERGENCY GENS ENG, FIRE PMPS ENGS & EXPER ENG

Source Capacity/Throughput:

Conditions for this source occur in the following groups: ZZZZ



### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.13]

### **Processes**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from any emergency generator, fire pump or experimental engine incorporated in Source P103A in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot of effluent gas volume.

# 002 [25 Pa. Code §123.21]

## **General**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from any emergency generator, fire pump or experimental engine incorporated in Source P103A in such a manner that the concentration of the sulfur oxides in the effluent gas exceeds 500 parts per million, by volume, dry basis.

### Fuel Restriction(s).

### # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The emergency generators engines, fire pumps engine and experimental engine incorporated in Source P103A shall only be fired on natural gas, propane, #2 fuel oil or diesel fuel to which no reclaimed or waste oil or other waste materials have been added.

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

## # 004 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Each emergency generator engine, fire pump engine and experimental engine incorporated in Source P103A shall not be operated more than 200 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

### 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.

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the number of hours each emergency generator engine, fire pump engine and experimental engine incorporated in Source P103A operates each month. These records shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

### 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.

## # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

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

- (a) For the spark-ignition engines incorporated in this source, the permittee shall:
- (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

## # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

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

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

- (a) For the compression-ignition engines incorporated in this source, the permittee shall:
- (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

## # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable maintenance requirements specified in 40 CFR Section 63.6625(j).

(j) For the spark-ignition engines, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c in 40 CFR Part 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c in 40 CFR Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning

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

limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

The permittee shall provide written notification to the Department stating your intent to utilize the oil analysis program prior to utilizing the oil analysis program.

## # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable monitoring requirements specified in 40 CFR Section 63.6625(i).

(i) For the compression-ignition engines, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d in 40 CFR Part 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d in 40 CFR Part 63 Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

The permittee shall provide written notification to the Department stating your intent to utilize the oil analysis program prior to utilizing the oil analysis program.

### VII. ADDITIONAL REQUIREMENTS.

## # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P103A includes the following emergency generators engines, fire pumps engines and an experimental engine:

- (1) Production Center 235 horsepower, #2 fuel oil-fired emergency generator engine.
- (2) Weis Music Building 144 horsepower, propane-fired emergency generator engine.
- (3) Mc Donnell Hall 106 horsepower, propane-fired emergency generator engine.
- (4) Swartz Hall 63 horsepower, propane-fired Onan model ESG6421-6005A emergency generator engine.
- (5) O'Leary Center 98 horsepower, natural gas-fired Kohler model 60RZG emergency generator engine.
- (6) Recreation & Athletics Center 449 horsepower, #2 fuel oil-fired Caterpillar model 3406 emergency generator engine.
- (7) Recreation & Athletics Center 41 horsepower #2 fuel oil-fired John Deere model 4045 fire pump engine.
- (8) Central Fire Pump 94 horsepower, #2 fuel oil-fired Clark model JU4H-UF40 fire pump engine.
- (9) Breakiron Engineering 33 horsepower, natural gas-fired Onan model 20GGDB emergency generator engine.
- (10) Larison Hall 63 horsepower, propane-fired Onan model 47GGFE emergency generator engine.
- (11) Langone Hall 158 horsepower, propane-fired Onan model 100GGHH emergency generator engine.
- (12) Vedder Hall 57 horsepower, natural gas-fired Cummins model 35GGFD emergency generator engine.



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(13) Dana Engineering - 60 horsepower, diesel-fired experimental engine engine.

## # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

What parts of my plant does this subpart cover?

The emergency stationary reciprocating internal combustion engines incorporated in Source 103A are subject to Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.6580 through 63.6675.

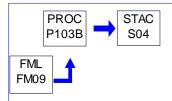
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## **SECTION D.** Source Level Requirements

Source ID: P103B Source Name: NON-RACT DIESEL EMERGENCY GENERATORS ENGINES (NSPS)

Source Capacity/Throughput:



### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §123.21]

### **General**

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from the emergency generators incorporated in Source P103B in such a manner that the concentration of the sulfur oxides in the effluent gas exceeds 500 parts per million, by volume, dry basis.

# 002 [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 40 CFR Section 89.113]

The exhaust opacity from the emergency generators incorporated in Source P103B shall not exceed:

- (1) 20 percent during the acceleration mode:
- (2) 15 percent during the lugging mode; and
- (3) 50 percent during the peaks in either the acceleration or lugging modes.

# 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 Cl internal co

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

The air contaminant emissions from the emergency generators identified in subsections (1), (2), (3), (5), (6), and (7) of condition #014 herein shall not exceed the following limitations:

- (1) non-methane hydrocarbons and nitrogen oxides (NMHC+NOx) 4.0 grams per kilowatt hour
- (2) carbon monoxide 3.5 grams per kilowatt hour
- (3) particulate matter 0.20 grams per kilowatt hour

The air contaminant emissions from the emergency generator identified in subsection (4) of condition #014 herein, shall not exceed the following limitations:

- (1) non-methane hydrocarbons and nitrogen oxides (NMHC+NOx) 6.4 grams per kilowatt hour
- (2) carbon monoxide 3.5 grams per kilowatt hour
- (3) particulate matter 0.20 grams per kilowatt hour

Compliance with the particulate matter limitations specified herein also ensures compliance with 25 Pa. Code Section 123.13.

## Fuel Restriction(s).

# 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emergency generators engines incorporated in Source P103B shall only be fired on diesel fuel to which no reclaimed

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

or waste oil or other waste materials have been added.

# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to

[Additional authority for this permit condition is also derived from 40 CFR Section 80.510]

The emergency generators incorporated in Source P103B shall only be fired on diesel fuel which complies with the following per-gallon standards:

- (1) A sulfur content of less than or equal to 15 parts per million.
- (2) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

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

## # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each of the emergency generators engines incorporated in Source P103B shall not be operated more than 200 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

The operation of each emergency generator incorporated in Source P103B, for the purpose of maintenance checks and readiness testing, shall not exceed 100 hours per year. Additionally, any operation of any emergency generator incorporated in Source P103B, other than to generate emergency power or to perform maintenance checks or readiness testing, is prohibited.

### II. TESTING REQUIREMENTS.

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4212]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

The permittee shall comply with all applicable compliance and performance test methods and procedures as specified in 40 CFR Part 60, Subpart IIII for each emergency generator incorporated in Source P103B.

### III. MONITORING REQUIREMENTS.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

Each emergency generator incorporated in Source P103B shall be equipped with a non-resettable hour meter.

## IV. RECORDKEEPING REQUIREMENTS.

## # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The total number of hours each emergency generator engine incorporated in Source P103B is operated each month.
- (2) The number of hours each emergency generator engine incorporated in Source P103B is operated each month for the





purpose of maintenance checks or readiness testing.

These records shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

The permittee shall comply with all applicable recordkeeping requirements as specified in 40 CFR Part 60, Subpart IIII for each emergency generator incorporated in Source P103B.

### V. REPORTING REQUIREMENTS.

## # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The submission of all requests, reports, application submittals and other communications required by Subpart IIII of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Sections 60.4200 through 60.4219, and Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Sections 63.6580 through 63.6675, must be made to both the U.S. Environmental Protection Agency and the Department. The copies may be sent to:

EPA Region 3, Air and Radiation Division, Permits Branch (3AD10) Four Penn Center, 1600 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19103-2852

and

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

### VI. WORK PRACTICE REQUIREMENTS.

# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

[Additional authority for this permit condition is also derived from 40 CFR Section 60.4206]

The emergency generators incorporated in Source P103B shall be operated in accordance with the manufacturer's written instructions or procedures developed by the permittee that have been approved by the manufacturer.

### VII. ADDITIONAL REQUIREMENTS.

## # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P103B includes the following emergency generators engines:

- (1) Psychology Lab 277 horsepower, diesel-fired Cummins model 150DGFA emergency generator engine.
- (2) Bertrand Library 230 horsepower, diesel-fired Caterpillar model D150-8 emergency generator engine.
- (3) Trax Hall 217 horsepower, diesel-fired Caterpillar model D125-6 emergency generator engine.
- (4) Computer Center 762 horsepower, diesel-fired Caterpillar model DM8155 emergency generator engine.
- (5) Public Safety 175 horsepower, diesel-fired Caterpillar model D175-2 emergency generator engine.
- (6) Lower Campus 373 horsepower, diesel-fired Cummins model 250DQDAA emergency generator engine.
- (7) Carnegie Building 86 horsepower, diesel-fired Clarke model JU4H-UFADJ8 emergency fire pump engine.





(8) Smith Hall - 64 horsepower diesel fired Clarke model JU4H-UFAEE8 emergency fire pump engine.

# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4200]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
Am I subject to this subpart?

The emergency generators incorporated in Source P103B are subject to the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 60.4200 through 60.4219.

# 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

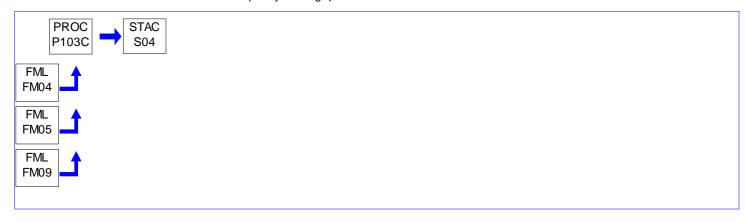
What parts of my plant does this subpart cover?

The stationary reciprocating internal combustion engines incorporated in Source 103B are subject to Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.6580 through 63.6675.



Source ID: P103C Source Name: NON-RACT NATURAL GAS EMERGENCY GENERATORS ENGINES (NSPS)

Source Capacity/Throughput:



### I. RESTRICTIONS.

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

## # 001 [25 Pa. Code §123.13]

### **Processes**

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from any emergency generator incorporated in Source P103C in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot of effluent gas volume.

# 002 [25 Pa. Code §123.21]

General

The permittee shall not permit the emission of sulfur oxides, expressed as sulfur dioxide (SO2), into the outdoor atmosphere from the emergency generators incorporated in Source P103C in such a manner that the concentration of the sulfur oxides in the effluent gas exceeds 500 parts per million, by volume, dry basis.

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]
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 40 CFR Section 1054.105]

The air contaminant emissions from the emergency generator identified in subsection (1) of condition #012 herein shall not exceed the following limitations:

- (1) hydrocarbons and nitrogen oxides (HC+NOx) 8.0 grams per kilowatt hour
- (2) carbon monoxide 610 grams per kilowatt hour

# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

The air contaminant emissions from the emergency generators identified in subsection (2), (6), and (7) of condition #012 herein shall not exceed the following limitations:

- (1) hydrocarbons and nitrogen oxides (HC+NOx) 10 grams per kilowatt hour
- (2) carbon monoxide 387 grams per kilowatt hour

The air contaminant emissions from the emergency generators identified in subsection (3), (4), and (5) of condition #012 herein shall not exceed the following limitations:

- (1) nitrogen oxides (HC+NOx) 2.0 grams per kilowatt hour and 160 ppmvd @ 15% oxygen
- (2) carbon monoxide 4.0 grams per kilowatt hour and 540 ppmvd @ 15% oxygen
- (3) volatile organic compounds (excluding formaldehyde) 1.0 grams per kilowatt hour and 86 ppmvd @ 15% oxygen





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

# 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each of the emergency generators engines incorporated in Source P103C shall not be operated more than 200 hours in any 12 consecutive month period.

The above limitation has been established at the request of the permittee.

# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

The emergency generators incorporated in Source P103C may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the emergency generator. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of any emergency generator incorporated in Source P103C beyond 100 hours per year. The emergency generators incorporated in Source P103C may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Any operation of any emergency generator incorporated in Source P103C, other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this condition, is prohibited.

### 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.

# 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain accurate and comprehensive records of the following:

- (1) The total number of hours each emergency generator engine incorporated in Source P103C is operated each month.
- (2) The number of hours each emergency generator incorporated in Source P103C is operated each month for the purpose of maintenance checks or readiness testing.

These records shall be retained for a minimum of 5 years and shall be made available to the Department upon request.

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

The permittee shall maintain records of maintenance conducted on each emergency generator incorporated in Source P103C.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI





## internal combustion engine?

The permittee shall comply with all applicable recordkeeping requirements as specified in 40 CFR Part 60, Subpart JJJJ for each emergency generator incorporated in Source P103C.

## V. REPORTING REQUIREMENTS.

## # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The submission of all requests, reports, application submittals and other communications required by Subpart JJJJ of the federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Sections 60.4230 through 60.4248, and Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Sections 63.6580 through 63.6675, must be made to both the U.S. Environmental Protection Agency and the Department. The copies may be sent to:

EPA Region 3, Air and Radiation Division,

Permits Branch (3AD10)

Four Penn Center, 1600 John F. Kennedy Boulevard,

Philadelphia, Pennsylvania 19103-2852

and

Pennsylvania Department of Environmental Protection Air Quality Program Manager 208 W. Third Street, Suite 101

Williamsport, PA 17701-6448

### VI. WORK PRACTICE REQUIREMENTS.

## # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is derived from the Request for Determination dated May 12, 2016]

The 302 horsepower natural gas-fired Doosan model D111TIC emergency generator engine for the Biology Building shall be equipped and operated with a three-way catalyst at all times the engine is operated.

# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

The permittee shall operate and maintain each emergency generator incorporated in Source P103C in accordance with the manufacturer's emission-related written instructions.

### VII. ADDITIONAL REQUIREMENTS.

## # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source P103C includes the following emergency generators engines:

- (1) Instructional Golf Facility 19 horsepower, propane-fired Cummins Onan model 12GSAA-6707C emergency generator.
- (2) Lambda Chi Alpha/Kappa Delta Rho 33 horsepower, natural gas-fired Cummins model GGMA emergency generator.
- (3) Academic West Building 301 horsepower, natural gas-fired Kohler model 200REZXB emergency generator.
- (4) South Campus Apartments; 477 horsepower, natural gas-fired, Caterpillar emergency generator.
- (5) Biology Building; 302 horsepower, natural gas-fired, Doosan model D111TIC emergency generator equipped with a three-way catalyst.
- (6) Affinity Houses; 56 horsepower, natural gas-fired, General Motors emergency generator.
- (7) Coleman Hall; 82 horsepower, propane-fired Olympian model G040LG emergency generator.
- (8) Academic East Building 477 bhp natural gas-fired emergency generator engine.





- (9) Holmes Hall 302 bhp natural gas-fired emergency generator engine.
- (10) Golf Course clubhouse 14.8 bhp propane-fired Kohler emergency generator engine.
- (11) Fran's House 64 bhp propane-fired emergency generator engine.

# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

The emergency generators incorporated in Source P103C are subject to the federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 60.4230 through 60.4248.

# 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

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

What parts of my plant does this subpart cover?

The stationary reciprocating internal combustion engines incorporated in Source 103C are subject to Subpart ZZZZ of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee shall comply with all applicable requirements specified in 40 CFR Sections 63.6580 through 63.6675.





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

Group Name: ZZZZ

Group Description: 6605, 6625, 6640, 6650, 6655, & 6660

Sources included in this group

ID	Name
P102	EMERGENCY GENERATOR ENGINE
P103	RACT EMERGENCY GENERATORS ENGINES & FIRE PUMP ENGINE
P103A	NON-RACT EMERGENCY GENS ENG, FIRE PMPS ENGS & EXPER ENG

### 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.

## # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable monitoring requirements specified in 40 CFR Section 63.6625(f).

### IV. RECORDKEEPING REQUIREMENTS.

### # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

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

What records must I keep?

The permittee shall comply with the applicable recordkeeping requirements specified in 40 CFR Section 63.6655

- (a) The permittee shall comply with the emission and operating limitations, The permittee shall keep the records described in paragraphs (a)(1) through (a)(5), (d), and (e) of this section.
- (1) A copy of each notification and report that you submitted to comply with 40 CFR Part 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR §63.10(b)(2)(xiv).
- (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
- (3) Records of performance tests and performance evaluations as required in 40 CFR §63.10(b)(2)(viii).
- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (d) The permittee shall keep the records required in Table 6 in 40 CFR Part 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you.
- (e) The permittee shall keep records of the maintenance conducted on the stationary engine in order to demonstrate that you operated and maintained the stationary engine and after-treatment control device (if any) according to your own maintenance plan.





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

## # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

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

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

The permittee shall comply with the applicable recordkeeping requirements specified in 40 CFR Section 63.6660.

- (a) The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).
- (b) As specified in 40 CFR §63.10(b)(1), The permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) The permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

### V. REPORTING REQUIREMENTS.

## # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]

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

What reports must I submit and when?

The permittee shall comply with the applicable reporting requirements specified in 40 CFR Section 63.6650.

(a) The permittee shall submit each report in Table 7 in 40 CFR Part 63 Subpart ZZZZ that applies to you.

### VI. WORK PRACTICE REQUIREMENTS.

### # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable work practice requirements specified in 40 CFR Section 63.6625(e).

(e) The permittee shall operate and maintain the stationary engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

## # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

The permittee shall comply with the applicable maintenance requirements specified in 40 CFR Section 63.6625(h).

(h) The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c in 40 CFR Part 63 Subpart ZZZZ.

## # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

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

The permittee shall comply with the applicable continuous compliance requirements specified in 40 CFR Section 63.6640(f).





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

### VII. ADDITIONAL REQUIREMENTS.

#### # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

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

What are my general requirements for complying with this subpart?

The permittee shall comply with the applicable general requirements specified in 40 CFR Section 63.6605.

- (a) The permittee shall be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR Part 63 Subpart ZZZZ that apply to you at all times.
- (b) At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

#### # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

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

The permittee shall comply with the applicable continuous compliance requirements specified in 40 CFR Sections 63.6640(a).

- (a) The permittee shall demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2d in 40 CFR Part 63 Subpart ZZZZ that apply to you according to methods specified in Table 6 in 40 CFR Part 63 Subpart ZZZZ. Table 6 in 40 CFR Part 63 Subpart ZZZZ requires:
- i. Operating and maintaining the stationary engine according to the manufacturer's emission-related operation and maintenance instructions; or
- ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.



60-00001



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

No Alternative Operations exist for this State Only facility.







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

No emission restrictions listed in this section of the permit.





## SECTION H. Miscellaneous.

The following air contaminant sources are considered to be insignificant in regards to air contaminant emissions and have been determined by the Department to be exempt from permitting requirements. However, this determination does not exempt the sources from compliance with all applicable State and Federal regulations and all applicable air quality regulations specified in 25 Pa. Code Chapters 121-143:

The following gasoline tanks are located at this facility:

- (1) 2,000 gallon underground tank located at the Facilities Garage
- (2) 1,000 gallon underground tank located at Golf Course Maintenance
- (3) 110 gallon aboveground tank located at the Brown Conference Center

The following #2 fuel oil/diesel tanks are located at this facility:

- (1) two 275 gallon aboveground tanks located at the Clauss House
- (2) 275 gallon aboveground tank located at the farmhouse (east)
- (3) 275 gallon aboveground tank located at the farmhouse (west)
- (4) two 275 gallon aboveground tanks located at the Galloway House
- (5) two 275 gallon aboveground tanks located at the Galloway House
- (6) 275 gallon aboveground tank located at the Kindig House
- (7) 275 gallon aboveground tank located at 55 Malcom Street
- (8) 275 gallon aboveground tank located at the Dillard House
- (9) 275 gallon aboveground tank located at the Anderson House
- (10) 400 gallon aboveground tank located at the Psychology Lab
- (11) 500 gallon aboveground tank located at the Psychology Lab
- (12) two 110 gallon above ground tanks located at the  $\mbox{\it Reitz}\,\mbox{\it House}$
- (13) 275 gallon aboveground tank located at the Berleson House (14) 400 gallon aboveground tank located at the Summit House (Theta Chi)
- (15) two 400 gallon aboveground tanks located at TKE
- (16) 400 gallon aboveground tank located at the Welding Shed (Recycling Shed)
- (17) 275 gallon aboveground tank located at the Art Barn Painting Studio
- (18) 110 gallon aboveground tank located at Taylor Hall
- (19) 500 gallon aboveground tank located at Rooke Chemistry
- (20) 400 gallon aboveground tank located at the Geiger Physical Plant
- (21) 275 gallon aboveground tank located at the Admin. Production Center
- (22) 500 gallon aboveground tank located at the Athletic & Recreation Center
- (23) 200 gallon aboveground tank located at the Athletic & Recreation Center
- (24) 275 gallon aboveground tank located at the Brown Conference Center-Caretaker Residence
- (25) three 275 gallon aboveground tanks located at the Brown Conference Center
- (26) 120 gallon aboveground tank located at Central FP
- (27) 350 gallon aboveground tank located at the Cogeneration Plant
- (28) 50,000 gallon aboveground tank located at the Cogeneration Plant
- (29) 550 gallon aboveground tank located at the Cogeneration Plant
- (30) 385 gallon aboveground tank located at the Cogeneration Plant
- (31) 2,000 gallon underground tank located at the Facilities Garage
- (32) 500 gallon aboveground tank located at Golf Course Maintenance

The following motor/hydraulic oil tanks are located at this facility:

- (1) two 150 gallon aboveground tanks located at the Facilities Garage
- (2) two 275 gallon aboveground tanks located at the Facilities Garage
- (3) 500 gallon aboveground tank located at the Facilities Garage
- (4) 110 gallon aboveground tank located at the Civil Engineering Test Building

The following propane tanks are located at this facility:

- (1) 400 gallon underground tank located at Larison Hall
- (2) 1000 gallon underground tank located at the Langone Center
- (3) 500 gallon underground tank located at Roberts Hall
- (4) 325 gallon underground tank located at Smith Hall





## SECTION H. Miscellaneous.

- (5) 500 gallon underground tank located at the Bertrand Library
- (6) 500 gallon underground tank located at Coleman Hall
- (7) 500 gallon underground tank located at Swartz Hall
- (8) 250 gallon underground tank located at the Weis Performing Arts Center
- (9) 500 gallon underground tank located at the Weis Music Building
- (10) 1000 gallon underground tank located at McDonnell Hall
- (11) 500 gallon aboveground tank located at the Greenhouse
- (12) two 500 gallon aboveground tanks located at the Sculpture Building
- (13) three 200 gallon aboveground tanks located at the Civil Engineering Test Building
- (14) two 100 gallon aboveground tanks located at the President's House
- (15) 500 gallon aboveground tank located at the Golf Course

Campus document production center (aka Print Shop)

The following cold cleaning machines are located at this facility:

- (1) Facilities Garage
- (2) Golf Course Maintenance Garage
- (3) Dana Engineering Mechanical Engineering Lab

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

This operating permit, SMOP 60-00001, was originally issued on February 11, 2002 and expires on January 31, 2007. Revision No. 1 issued on June 18, 2003 was an administrative amendment and a minor operating permit modification. The administrative amendment was to incorporate the terms and conditions of Plan Approval 60-0001B for the operation of a 5.5 megawatt natural gas/#2 fuel oil-fired (dual fuel) Solar Taurus model T-7300S combustion turbine identified in this operating permit as Source P101. The minor operating permit modification was to include additional requirements to assure the facility retains Synthetic Minor status, and includes the incorporation of three small combustion units and four small generators (and corrections to the heat input capacities of eight small boilers under Source 037). All revised monitoring, recordkeeping and reporting requirements included in this operating permit became effective on June 18, 2003.

Revision No. 2 was issued on February 13, 2004 to incorporate an administrative amendment, which was a Department initiated revision, to change the designations of Sources P102 and P103 from combustion units to process units. Also included was a new 94 hp engine driven central fire pump to Source P103A. All requirements including monitoring, record-keeping, and reporting conditions as specified in Revision No.2 of the State Only Operating Permit, became effective on February 13, 2004.

This operating permit, SMOP 60-00001, was reissued on January 29, 2008 and expires on January 28, 2013.



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