



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

STATE ONLY SYNTHETIC MINOR OPERATING PERMIT

Issue Date:	February 8, 2022	Effective Date:	March 13, 2024
Revision Date:	March 13, 2024	Expiration Date:	February 9, 2027
Revision Type:	Modification		

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: 48-00016

Synthetic Minor

Federal Tax Id - Plant Code: 24-0795445-1

Owner Information

Name: LEHIGH UNIV
Mailing Address: 681 TAYLOR ST
BETHLEHEM, PA 18015-3107

Plant Information

Plant: LEHIGH UNIV/PACKER & MOUNTAINTOP CAMPUSES
Location: 48 Northampton County 48001 Bethlehem City
SIC Code: 8221 Services - Colleges And Universities

Responsible Official

Name: DOUGLAS SPENDEL
Title: ASSOC DIR UTIL & ENGR
Phone: (610) 758 - 3974 Email: dbs288@lehigh.edu

Permit Contact Person

Name: DOUGLAS SPENDEL
Title: ASSOC DIR UTIL & ENGR
Phone: (610) 758 - 3974 Email: dbs288@lehigh.edu

[Signature] _____
MARK J. WEJKSZNER, NORTHEAST REGION AIR PROGRAM MANAGER



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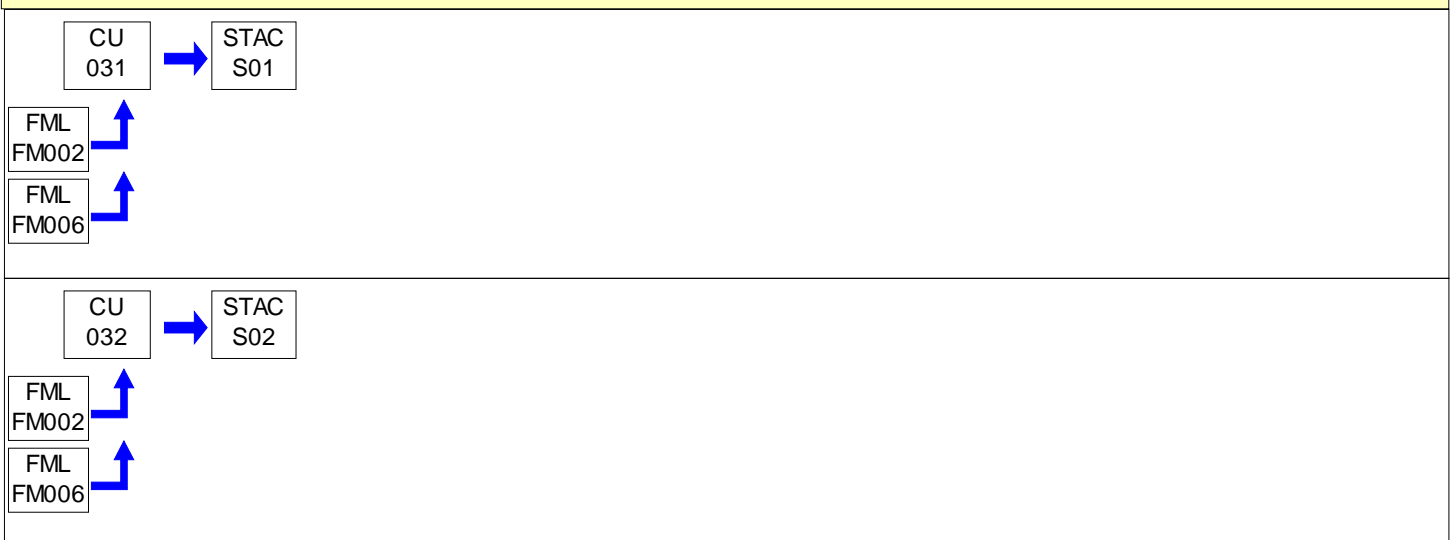
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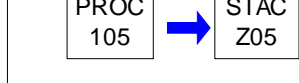
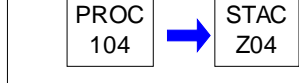
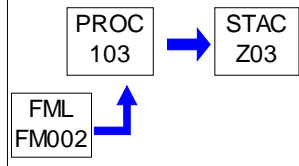
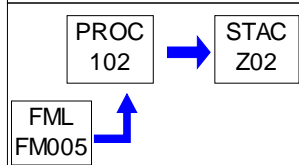
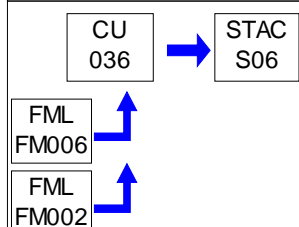
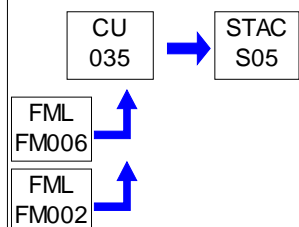
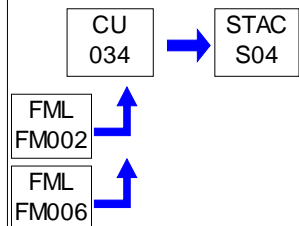
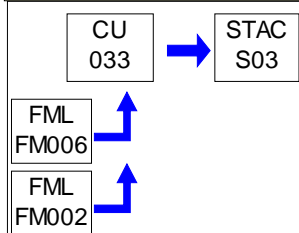
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
031	B & W 1	38.800	MMBTU/HR
032	B & W 2	38.800	MMBTU/HR
033	B & W 3	38.800	MMBTU/HR
034	KEELER BOILER 1	34.000	MMBTU/HR
035	KEELER BOILER 2	34.000	MMBTU/HR
036	KEELER BOILER 3	43.700	MMBTU/HR
102	MISC NATURAL GAS/PROPANE COMBUSTION UNITS (170)	91.510	MMBTU/HR
103	NATURAL GAS EMERGENCY GENERATORS (54)		
104	DIESEL-FIRED EMERGENCY GENERATORS (6)		
105	GASOLINE FUEL UNDERGROUND STORAGE TANKS		
106	PARTS CLEANERS (3)		
FM002	NATURAL GAS PIPELINE		
FM005	PROPANE STORAGE TANKS		
FM006	NO.2 FUEL OIL TANKS		
S01	B & W BOILER 1 STACK		
S02	B & W BOILER 2 STACK		
S03	B & W BOILER 3 STACK		
S04	KEELER BOILER 1 STACK		
S05	KEELER BOILER 2 STACK		
S06	KEELER BOILER 3 STACK		
Z02	FUGITIVE EMISSIONS		
Z03	FUGITIVE EMISSIONS		
Z04	FUGITIVE EMISSIONS		
Z05	FUGITIVE VOC EMISSIONS		
Z06	FUGITIVE EMISSIONS		

PERMIT MAPS



PERMIT MAPS





PERMIT MAPS

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Section 127.14 (relating to exemptions)

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

#015 [25 Pa. Code § 127.11]**Reactivation**

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#016 [25 Pa. Code § 127.36]**Health Risk-based Emission Standards and Operating Practice Requirements.**

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]**Circumvention.**

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

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

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

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

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

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

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

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

002 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Site Level Requirement, Condition #001 (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

003 [25 Pa. Code §123.31]**Limitations****MALODOR EMISSIONS**

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

004 [25 Pa. Code §123.41]**Limitations****VISIBLE EMISSIONS**

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

- (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.

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

The permittee shall not combust more than 1,627,373,000 scf/yr of natural gas, in total, on a 12-month rolling sum basis.

**SECTION C. Site Level 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.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.****FUGITIVE EMISSIONS**

The permittee shall conduct monthly inspections of the Packer, Mountaintop, and Goodman Campuses, during daylight hours when the plant is in operation, to detect the presence of fugitive emissions visible beyond the boundaries of Lehigh University, as stated in Site Level Requirement, Condition #002.

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

(a) Visual emission checks of each emission point subject to an opacity limit shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using 40 CFR 60 Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct a 40 CFR Appendix A, Method 9 evaluation within four (4) hours. A Method 9 evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operating at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.

(b) The permittee shall monitor visible emissions from sources subject to an opacity limit (except sources fired by natural gas) in accordance with the following procedures, test methods and frequencies:

(1) EPA Method 22 shall be used to determine visible emissions. EPA Method 9 shall be used to determine opacity. Prior notification and a pre-test plan are not required to be submitted for each test or survey conducted.

(2) The permittee shall use the following monitoring schedule for conducting the visible emissions tests required by this condition:

(i) The initial monitoring frequency for performing visible tests is once per month.

(ii) If the tests conducted during six (6) consecutive months of operation show opacity within the applicable limits, the tests need only be done semi-annually.

(iii) If the tests conducted during the semi-annual test show opacity within the applicable limits, the tests need only be done once per year.

(iv) If an exceedance occurs, the tests for the exceeding monitoring point will start over with monthly checks according to the monitoring frequency table above.

(3) All visible emissions tests shall be conducted during operating conditions that have the potential to create visible emissions.

(4) If the observer is unable to conduct the tests due to unit downtime, visual interference caused by other visible emission sources (e.g. fugitive emissions during high wind conditions), or due to inclement weather conditions such as fog, heavy rain, or snow, the observer shall note such conditions on the data observation sheet and make at least three (3) periodic attempts to conduct the test throughout the day. The permittee shall attempt to make the observations daily until a valid observation period is completed.

008 [25 Pa. Code §127.441]**Operating permit terms and conditions.****VISIBLE AND FUGITIVE EMISSIONS**

**SECTION C. Site Level Requirements**

(a) The permittee shall conduct monthly inspections of the facility perimeter, during daylight hours when the plant is in operation, to detect visible, fugitive, and malodor emissions as follows:

(1) Visible emissions in excess of the limits stated in Site Level Requirement, Condition #004.

(2) Visible emissions may be measured according to the methods specified in Site Level Requirement, Condition #015, or alternatively, plant personnel who observe any visible emissions (i.e. emissions in excess of 0% opacity) will report the incident of visible emissions to the Department within four (4) hours of each incident and make arrangements for a certified observer to verify the opacity of the emissions.

(3) The presence of fugitive emissions visible beyond the boundaries of the facility, as stated in Site Level Requirement, Condition #002.

(4) The presence of malodor emissions beyond the boundaries of the facility, as stated in Site Level Requirement, Condition #003.

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

The permittee shall maintain records of natural gas usage on a 12-month rolling sum basis to comply with Site Level Condition #005.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep annual records of greenhouse gas emissions as CO₂e. Should the facility exceed 25,000 metric tons per year CO₂e, the facility shall comply with all applicable requirements of 40 CFR 98 Subpart C.

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.****FUGITIVE AND VISIBLE EMISSIONS**

(a) The permittee shall, at the conclusion of each monthly inspection, record all occurrences of fugitive or visible emissions which deviate from the limitations of Site Level Requirement, Conditions #002 and #004, in a log book.

(b) The permittee shall record any and all corrective action(s) taken to abate each recorded deviation or prevent future occurrences.

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

The company, within one (1) hour of occurrence, shall notify the Department, at 610-861-2070, of any malfunction, recordkeeping and reporting errors, or other possible non-compliance issues, which result in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulations contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within five (5) working days following the incident describing the malfunction, recordkeeping and reporting error or other non-compliance issue and the corrective actions being taken. The Department may take enforcement action for any violations of the applicable standards.

V. REPORTING REQUIREMENTS.**# 013 [25 Pa. Code §135.3]****Reporting**

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial

**SECTION C. Site Level Requirements**

source report within sixty (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.

(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.**# 014 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(a) A person responsible for any source specified in Site Level Requirement, Condition #001 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

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

015 [25 Pa. Code §123.43]**Measuring techniques****VISIBLE EMISSIONS**

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.

016 [25 Pa. Code §129.14]**Open burning operations****AIR BASINS**

- (a) No person may permit the open burning of material in an air basin.
- (b) Exceptions: The requirements of subsection (a) do not apply where the open burning operations result from:
 - (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
 - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
 - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
 - (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
 - (5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.

**SECTION C. Site Level Requirements**

(6) A fire set solely for recreational or ceremonial purposes.

(7) A fire set solely for cooking food.

(c) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:

(1) As used in this subsection the following terms shall have the following meanings:

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

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

(2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:

(i) Air curtain destructors shall be used when burning clearing and grubbing wastes.

(ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).

(iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.

(iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.

(3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:

(i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.

(4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

VII. ADDITIONAL REQUIREMENTS.

017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

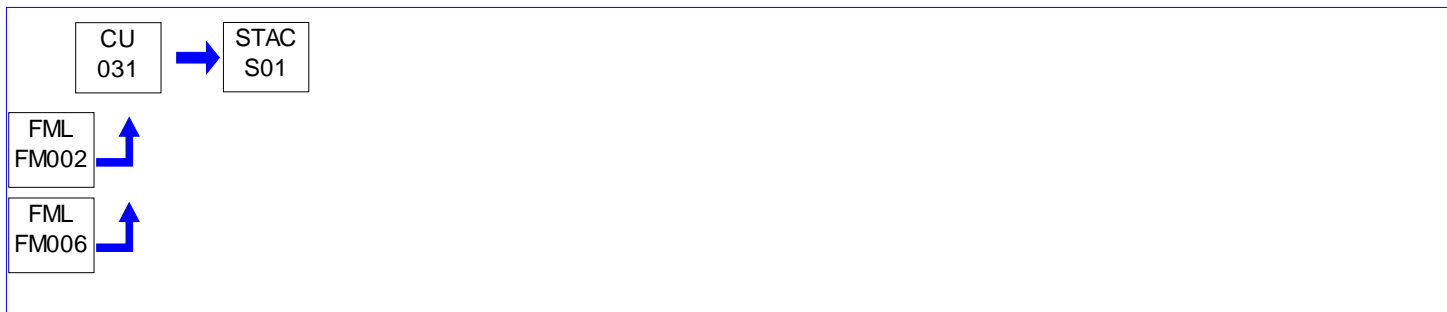
**SECTION D. Source Level Requirements**

Source ID: 031

Source Name: B & W 1

Source Capacity/Throughput: 38.800 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 032

Source Name: B & W 2

Source Capacity/Throughput: 38.800 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

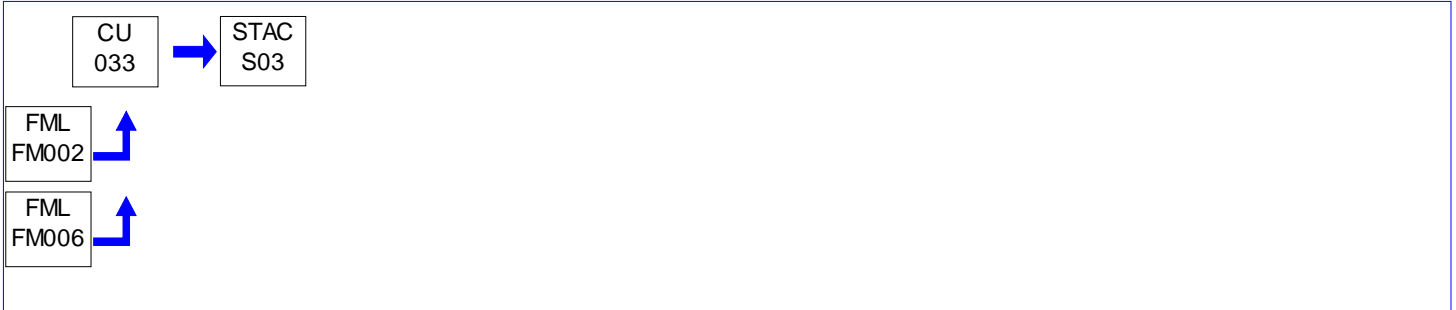
**SECTION D. Source Level Requirements**

Source ID: 033

Source Name: B & W 3

Source Capacity/Throughput: 38.800 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 034

Source Name: KEELER BOILER 1

Source Capacity/Throughput: 34.000 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 035

Source Name: KEELER BOILER 2

Source Capacity/Throughput: 34.000 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

Source ID: 036

Source Name: KEELER BOILER 3

Source Capacity/Throughput: 43.700 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

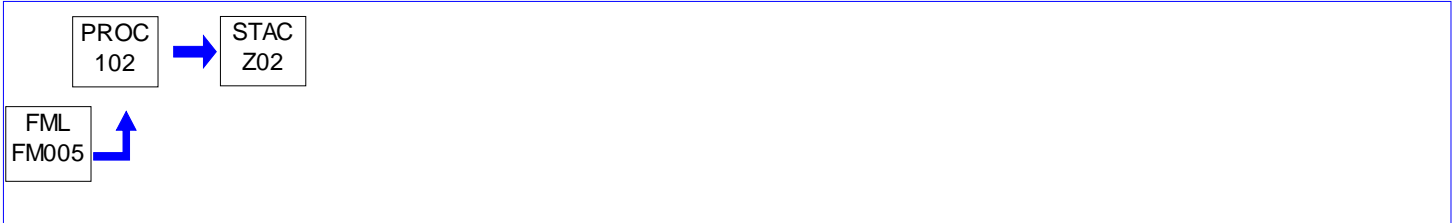
**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: MISC NATURAL GAS/PROPANE COMBUSTION UNITS (170)

Source Capacity/Throughput: 91.510 MMBTU/HR

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

This source includes the following natural gas/propane fired water heaters:

(a) One Hundred Twelve (112) units located at the Packer Campus:

(1) One (1) 0.252 MMBtu/Hr Columbia Steam Boiler (CT Series) located in Bldg. 19 (Packard Lab - Boiler Room).

(2) One (1) 0.199 MMBtu/Hr Bradford White Water Heater (Model EF100T199E3N2) located in Bldg. 20 (Packer House, 217 W Packer Ave).

(3) One (1) 0.299 MMBtu/Hr Weil Mclain Hot Water Boiler (Model EVG299) located in Bldg. 21 (Hillel House, 233 W Packer

**SECTION D. Source Level Requirements**

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- (4) One (1) 0.040 MMBtu/Hr A.O. Smith Water Heater (Model #GVC 50 300) located in Bldg. 22 (West Packer House, 230 W Packer Ave)
- (5) One (1) 0.138 MMBtu/Hr Weil McLain Hot Water Boiler (Model CGM-6) located in Bldg. 22 (W Packer House, 230 W Packer Ave)
- (6) One (1) 0.155 MMBtu/Hr Weil McLain Hot Water Boiler (Model Ultra 155) located in Bldg. 23 (516 Brodhead Ave, Sustainability)
- (7) One (1) 0.399 MMBtu/Hr Weil McLain Hot Water Boiler (Model Ultra 399) located in Bldg. 23 (518-524 Brodhead Ave)
- (8) One (1) 0.300 MMBtu/Hr Weil McLain Hot Water Heater (Model EG-75-5PN) located Bldg. 23 (526 Brodhead Ave)
- (9) One (1) 0.040 MMBtu/Hr Bradford White Water Heater (Model M1403S6FBN) located in Bldg. 23 (526 Brodhead Ave)
- (10) One (1) 0.0355 MMBtu/Hr A.O. Smith Water Heater (Model XCVL 30 300) located in Bldg. 23-A (EHS, 211 Warren Sq.)
- (11) One (1) 0.100 MMBtu/Hr Carrier Package Unit (Model PG96VTAA601100CBA) located in Bldg. 23-A (EHS, 211 Warren Sq.)
- (12) One (1) 0.147 MMBtu/Hr New Yorker Water Heater (Model FR-147-W) located in Bldg. 24 (Warren Sq. C, 532-534 Brodhead Ave)
- (13) One (1) 0.155 MMBtu/Hr Weil McLain Hot Water Boiler (Model 155) located in Bldg. 24 (Warren Sq. C 532-534 Bordhead Ave)
- (14) One (1) 0.076 MMBtu/Hr Bradford White Water Heater (Model RG275H6N) located in Bldg. 24 (Warren Sq. C, 532-534 Brodhead Ave)
- (15) One (1) 0.140 MMBtu/Hr Weil McLain Boiler (Model GV-5) located in Bldg. 25 (Warren Sq. E, 227-229 Warren Sq)
- (16) One (1) 0.175 MMBtu/Hr Weil McLain Boiler (Model GV-6) located in Bldg. 25 (Warren Sq. E, 227-229 Warren Sq.)
- (17) One (1) 0.155 MMBtu/Hr Bradford White Water Heater (Model D38T1553N) located in Bldg. 25 (Warren Sq. E, 227-229 Warren Sq.)
- (18) One (1) 0.01 MMBtu/Hr Empire Wall Furnace (Model DV-210-7SG) located in Bldg. 26 (26 Memorial Dr West, Sayre Observatory)
- (19) One (1) 0.65 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-6) located in Bldg. 28 (28 University Dr.)
- (20) One (1) 0.285 MMBtu/Hr Lochinvar Hot Water Heater (Model SNA286-125) located in Bldg. 31 (Williams Hall)
- (21) One (1) 0.155 MMBtu/Hr Weil McLain Hot Water Boiler (Model Ultra 155) located in Bldg. 41 (Dialogue Center)
- (22) One (1) 0.088 MMBtu/Jr Payne Package Unit (Model PG80ESAA48090CBA) located in 42 (IDEAL Center)
- (23) One (1) 0.725 MMBtu/Hr Bradford White Hot Water Heater (Model #D80T5053NA) located in Bldg. 51 (Centennial II Complex)
- (24) One (1) 1.05 MMBtu/Hr Patterson-Kelley Hot Water Boiler (Model C-1050) located in Bldg. 51 (Centennial II Complex)
- (25) One (1) 1.200 MMBtu/Hr Patterson-Kelley Hot Water Boiler (Model N-1200) located in Bldg. 51 (Centennial II Complex)
- (27) Two (2) 1.200 MMBtu/Hr Patterson-Kelley Hot Water Boiler (Model N-1200) located in Bldg. 63 (Rathbone Dining Hall)
- (28) One (1) 0.499 MMBtu/Hr A.O. Smith Water Heater (Model BTH-500A 200) located in Bldg. 63 (Rathbone Dining Hall)
- (31) Three (3) 2 MMBtu/Hr Fulton Hot Water Boilers (Model EDR-2000) located in Bldg. 69-AB/C (SHM Houses)
- (33) Two (2) 0.75 MMBtu/Hr Power VT Plus Hot Water Heaters (Model 75 LX 300A-PVIF) located in Bldg. 69-AB/C (SHM Houses)
- (35) Two (2) 0.399 MMBtu/Hr Weil McLain Hot Water Boilers (Model Ultra 399) located in Bldg. 80 (Psi Upsilon)
- (37) Two (2) 0.199 MMBtu/Hr Rianni Hot Water Heaters (Model CU199iN) located in Bldg. (Delta Upsilon)
- (38) One (1) 1.815 MMBtu/Hr Weil McLain Hot Water Boiler (Model J-12-B) located in Bldg. 83 (Pi Beta Phi)
- (40) Two (2) 0.299 MMBtu/Hr Weil McLain Hot Water Boilers (Model EVG299) located in Bldg. 84 (Chi Psi)
- (42) Two (2) 0.299 MMBtu/Hr Weil McLain Hot Water Boilers (Model EVG 299) located in Bldg. 85 (House 85)
- (44) Two (2) 0.399 MMBtu/Hr Weil McLain Hot Water Boiler (Model 399-CT) located in Bldg. 86 (Delta Chi)
- (46) Two (2) 0.199 MMBtu/Hr Rinnai Hot Water Heater (Model C199) located in Bldg. 87 (House 87)
- (47) One (1) 1.56 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-13) located in Bldg. 88 (House 88)
- (49) Two (2) 0.299 MMBtu/Hr Weil McLain Hot Water Boiler (Model Ultra 299) located in Bldg. 89 (House 89)
- (50) One (1) 0.75 MMBtu/Hr Weil McLain Hot Water Boiler (Model Ultra 750) located in Bldg. 90 (Phi Sigma Kappa)
- (51) One (1) 0.935 MMBtu/Hr Weil McLain Hot Water Boiler (Model 80) located in Bldg. 91 (Theta Chi)
- (52) One (1) 0.78 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-7) located in Bldg. 92 (Sigma Phi Epsilon)
- (53) One (1) 1.815 MMBtu/Hr Weil McLain Hot Water Boiler (Model J-12-B) located in Bldg. 93 (House 93)
- (55) Two (2) 0.299 MMBtu/Hr Weil McLain Hot Water Boiler (Model EVG299) located in Bldg. 94 (Zeta Tau Alpha)
- (57) Two (2) 0.399 MMBtu/Hr Weil McLain Hot Water Boiler (Model EVG399) located in Bldg. 95 (Alpha Gamma Delta)
- (59) Two (2) 0.399 MMBtu/Hr Weil McLain Hot Water Boiler (Model EVG399) located in Bldg. 96 (House 96)
- (60) One (1) 1.56 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-13) located in Bldg. 97 (Phi Delta Theta)
- (62) Two (2) 0.299 MMBtu/Hr Weil McLain Hot Water Boiler (Model EVG299) located in Bldg. 98 (Alpha Phi)

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- (63) One (1) 1.17 MMBtu/Hr Weil McLain Hot Water Boilers (Model LGB-10) located in Bldg. 99 (Alpha Tau Omega)
- (65) Two (2) 0.299 MMBtu/Hr Weil McLain Water Heater (Model EVG299) located in Bldg. 100 (Gamma Phi Beta)
- (68) Three (3) 0.305 MMBtu/Hr Weil McLain Hot Water Boiler (Model PFG-6-PIN) located in Bldg. 101 (Umoja House)
- (69) One (1) 0.75 MMBtu/Hr Weil McLain Hot Water Boiler (Model Ultra 750) located in Bldg. 102 (Sigma Chi)
- (70) One (1) 0.91 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB) located in Bldg. 104 (Kappa Delta)
- (72) Two (2) 0.65 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-6) located in Bldg. 105 (Chi Phi)
- (73) One (1) 1.17 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-10) located in Bldg. 106 (Kappa Alpha Theta)
- (74) One (1) 1.56 MMBtu/Hr Weil McLain Hot Water Boiler (Model LGB-13) located in Bldg. 107 (Alpha Omicron Pi)
- (76) Two (2) 0.315 MMBtu/Hr Lochinvar Hot Water Boiler (Model RBN315) located in Bldg. 109-A (Sayre Park Village A)
- (77) One (1) 0.399 MMBtu/Hr Lochinvar Hot Water Heater (Model CWN399PM) located in Bldg. 109-A (Sayre Park Village A)
- (79) Two (2) 0.299 MMBtu/Hr Weil McLain Hot Water Boiler (Model EVG 299) located in Bldg. 109-B (Sayre Park Village B)
- (80) One (1) 0.399 MMBtu/Hr Lochinvar Hot Water Heater (Model CWN399PM) located in Bldg. 109-B (Sayre Park Village B)
- (82) Two (2) 0.315 MMBtu/Hr Lochinvar Hot Water Boiler (Model RBN315) located in Bldg. 109-C (Sayre Park Village C)
- (83) One (1) 0.399 MMBtu/Hr Lochinvar Hot Water Heater (Model CWN399PM) located in Bldg. 109-C (Sayre Park Village C)
- (84) One (1) 0.0751 MMBtu/Hr A.O. Smith Water Heater (Model BT100 300) located in Bldg. 109-D (Sayre Park Village D)
- (86) Two (2) 0.154 MMBtu/Hr Carrier Package Unit WeatherMaker 8000 (Model 58WAV155-20) located in Bldg. 192 (Warren Sq. B, 210-212 Warren Sq.)
- (87) One (1) 0.040 MMBtu/Hr A.O. Smith Water Heater (Model GCG-50 400) located in Bldg. 192 (Warren Sq. B, 210-212 Warren Sq.)
- (88) One (1) 0.0751 MMBtu/Hr A.O. Smith Water Heater (Model FCG-75 300) located in Bldg. 192 (Warren Sq. B, 210-212 Warren Sq.)
- (90) Two (2) 0.154 MMBtu/Hr Carrier Package Unit WeatherMaker 9200 (Model 58WAV155-20) located in Bldg. 193 (Warren Sq. D, 222 Summit St.)
- (92) Two (2) 0.040 MMBtu/Hr A.O. Smith Water Heater (Model GCV 50 200) located in Bldg. 193 (Warren Sq. D, 222 Summit St.)
- (93) One (1) 0.070 MMBtu/Hr Weil McLain Water Heater (Model GV90+3) located in Bldg. 195 (219 Warren Sq. Animal Lab)
- (95) Two (2) 0.175 MMBtu/Hr Weil McLain Water Heater (Model CGa-6-PIDN) located in Bldg. 196 (Warren Sq. A, 220-222 Warren Sq.)
- (97) Two (2) 0.040 MMBtu/Hr A.O. Smith Water Heater (Model GCV-50 200) located in Bldg. 196 (Warren Sq. A, 220-222 Warren Sq.)
- (98) One (1) 0.12 MMBtu/Hr National US Boiler (Model 5-W-99A PA) located in Bldg. 198 (618 Brodhead Ave, Budget Office)
- (99) One (1) 0.04 MMBtu/Hr Bradford White Water Heater (Model MI403S6FBN) located in Bldg. 198 (618 Brodhead Ave, Budget Office)
- (100) One (1) 0.120 MMBtu/Hr Carrier Package Unit WeatherMaker 9200 (Model 58MXA120-20) located in Bldg. 199 (622 Brodhead Ave, Parking Office)
- (101) One (1) 1.155 MMBtu/Hr Weil McLain Water Heater (Model BG-586-W-S) located in Bldg. 200 (Mohler Lab, 200 Packer)
- (103) Two (2) 6 MMBtu/hr Fulton Hot Water Boilers (Model EDR+6000) located in Bldg. 205 (HST Building)
- (107) Four (4) 0.5 MMBtu/Hr A.O. Smith Water Heaters (Model Cyclone BTH-500A) located in Bldg. 205 (HST Building)
- (109) Two (2) 3.2 MMBtu/Hr Fulton Steam Boilers (Model VMP-80) located in Bldg. 205 (HST Building)
- (110) One (1) 0.04 MMBtu/Hr A.O. Smith Water Heater (Model FSG 50 248) located in Bldg. 224 (224 W Packer Ave)
- (111) One (1) 0.21 MMBtu/Hr Weil McLain Hot Water Boiler (Model CGa-7-PIDN) located in Bldg. 224 (224 W Packer Ave)
- (112) One (1) 0.14 MMBtu/Hr Weil McLain Hot Water Boiler (Model CGa-5-PIDN) located in Bldg. 316 (416 E 5th St, Small Business Development)

(b) Fifty Seven (57) units located at the Goodman Campus:

- (3) Three (3) 1.026 MMBtu/Hr Weil McLain Steam Boiler (Model 688) located in Bldg. 121 (Varsity House)
- (4) One (1) 0.42 MMBtu/Hr A.O. Smith Water Heater (Model 420 932) located in Bldg. 121 (Varsity House)
- (5) One (1) 0.245 MMBtu/Hr Weil McLain Hot Water Boiler (Model CGa-7-PIDN) located in Bldg. 121 (Varsity House)
- (7) Two (2) 0.199 MMBtu/Hr Bradford White Water Heater (Model EF100T199E3N2) located in Bldg. 121 (Varsity House)
- (11) Four (4) 0.32 MMBtu/Hr Dexter Laundry Dryer (Model DN0120NC-10EB2R-WWKSG-USX) located in Bldg. 121 (Varsity House)
- (12) One (1) 0.216 MMBtu/Hr Dexter Laundry Dryer (Model DDBD50HCZ-11) located in Bldg. 121 (Varsity House)
- (13) One (1) 0.395 MMBtu/Hr Cissell Laundry Dryer (Model CT170NRDF6K1W01) located in Bldg. 121 (Varsity House)
- (14) One (1) 0.20 MMBtu/Hr Daikin Package Rooftop Unit (Model DPS015AHMG2DW-6) located in Bldg. 121 (Varsity House)
- (15) One (1) 0.30 MMBtu/Hr Daikin Package Rooftop Unit (Model MPS026GG2DV1CBBV-B) located in Bldg. 121 (Varsity House)

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House)

- (16) One (1) 0.115 MMBtu/Hr Carrier Package Rooftop Unit (Model 48HCEA06A2A5A0A0A0) located in Bldg. 121 (Varsity House)
- (18) Two (2) 0.20 MMBtu/Hr Sterling Package Rooftop Unit (Model E1G-PV20C201N41K5TB3H2J2K2K5L1) located in Bldg. 121 (Varsity House)
- (19) One (1) 0.12 MMBtu/Hr Carrier Package Rooftop Unit (Model 48HJE008 541DA) located in Bldg. 121 (Varsity House)
- (20) One (1) 0.12 MMBtu/Hr Carrier Package Rooftop Unit (Model 48HCED08A2A5A0A0A0) located in Bldg. 121 (Varsity House)
- (21) One (1) 0.224 MMBtu/Hr Carrier Package Rooftop Unit (Model 48HJF009 541DA) located in Bldg. 121 (Varsity House)
- (22) One (1) 1.20 MMBtu/Hr Patterson Water Heater (Model N1200) located in Bldg. 123 (Rauch Field House)
- (26) Four (4) 1.26 MMBtu/Hr Power Flame Heating Burners (Model JR30A-12U) located in Bldg. 123 (Rauch Field House)
- (28) Two (2) 1.90 MMBtu/Hr Patterson-Kelley Water Heaters (Model N-1900) located in Bldg. 124 (Stabler Arena)
- (29) One (1) 0.12 MMBtu/Hr Trane Package Rooftop Unit (Model ysc092a4rla1gd000000000300) located in Bldg. 124 (Stabler Arena)
- (30) One (1) 0.30 MMBtu/Hr Bradford White Water Heater (Model #D100L3003NA) located in Bldg. 125 (125 Goodman Dr.)
- (32) Two (2) 0.115 MMBtu/Hr Advanced Distributor Products Garage Space Heater (Model SEP-115A-5) located in Bldg. 126 (126 Goodman Dr, Transportation Bldg)
- (33) One (1) 0.10 MMBtu/Hr Sterling Garage Space Heater (Model TF-100) located in Bldg. 126 (126 Goodman Dr, Transportation Bldg)
- (34) One (1) 0.03 MMBtu/Hr Dayton Garage Space Heater (Model 3E402B) located in Bldg. 126 (126 Goodman Dr, Transportation Bldg)
- (35) One (1) 0.354 MMBtu/Hr Karcher Parts Washer (Model HDS 3.9/30 Ea ST NG) located in Bldg. 126 (126 Goodman Dr, Transportation Bldg)
- (36) One (1) 0.19 MMBtu/Hr A.O. Smith Water Heaters (Model BTR 199 118) located in Bldg. 128 (Lewis Tennis Center)
- (37) One (1) 0.20 MMBtu/Hr American Standard Package Unit located in Bldg. 128 (Lewis Tennis Center)
- (38) One (1) 1.56 MMBtu/Hr Johnson MarCraft Heater (Model AR55DC-20-MG-F) located in Bldg. 128 (Lewis Tennis Center)
- (50) Twelve (12) 0.04 MMBtu/Hr Ambi-Rad Infrared Radiant Heater (Model SC/ER/GX12) located in Bldg. 128 (Lewis Tennis Center)
- (53) Three (3) 0.03 MMBtu/Hr Roberts Gordon Unit Heaters (Model CGTH-30) located in Bldg. 149 (Mulvihill Golf Center)
- (54) One (1) 0.94 MMBtu/Hr Patterson Water Heater located in Bldg. 150 (Goodman Stadium House)
- (56) Two (2) 0.200 MMBtu/Hr Trane Package Unit (Model GLND020) located in Bldg. 150 (Goodman Stadium House)
- (57) One (1) 0.25 MMBtu/Hr Trane Package Unit (Model GLND025) located in Bldg. 150 (Goodman Stadium House)

One (1) Unit located at Mountaintop Campus:

- (1) One (1) 0.105 MMBtu/Hr Nortek Global Unit Heater (Model UDAP-100) located in Bldg. 114-C (Former Gas House Bldg)

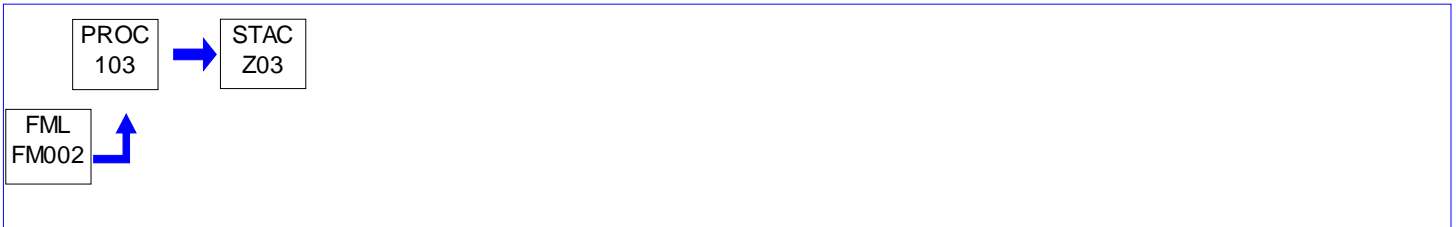
**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: NATURAL GAS EMERGENCY GENERATORS (54)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP-2
GROUP-3

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

**# 001 [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?**

Applicable to Williams Hall, House 104, and Theta Chi engines:

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in §60.4231(a) for their stationary SI ICE.

[Excerpt from §60.4231(a)]

(1) If engine displacement is below 225cc and manufacturing dates are July 1, 2008 to December 31, 2011, the engine must meet the emission standards and related requirements for nonhandheld engines under 40 CFR part 90.

(2) If engine displacement is below 225cc and manufacturing dates are January 1, 2012 or later, the engine must meet the emission standards and related requirements for nonhandheld engines under 40 CFR part 1054.

(3) If engine displacement at or above 225cc and manufacturing dates are July 1, 2008 to December 31, 2010, the engine must meet the emission standards and related requirements for nonhandheld engines under 40 CFR part 90.

(4) If engine displacement is below 225cc and manufacturing dates are January 1, 2011 or later, the engine must meet the emission standards and related requirements for nonhandheld engines under 40 CFR part 1054.

(b) - (c) Not applicable.

Applicable to Sher/Fair Physics, Taylor Gym, FM Library, Packard Lab, Seely Mudd, MTC – CH&R, Centennial 1, and M&MTaylor engines:

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) must comply with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE.

[Excerpt from Table 1]

(1) NO_x + HC emissions must be less than 10 g/HP-hr.

(2) CO emissions must be less than 387 g/HP-hr.

Applicable to only the LTS - Packard Lab engine, APC CH&R engines, and Police Station engine:

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

**SECTION D. Source Level Requirements**

[Excerpt from Table 1]

- (1) NO_x emissions must be less than 2.0 g/HP-hr.
- (2) CO emissions must be less than 4.0 g/HP-hr.
- (3) VOC emissions (excluding formaldehyde) must be less than 1.0 g/HP-hr.
- (f) – (h) Not applicable.

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.

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4237]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?**

- (a) Not applicable.
- (b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.
- (c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

IV. RECORDKEEPING REQUIREMENTS.

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

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

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
 - (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
 - (2) Maintenance conducted on the engine.
 - (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
 - (4) Not applicable.
- (b) For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI

**SECTION D. Source Level Requirements**

emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) – (d) Not applicable.

(e) If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in §60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.

(1) The report must contain the following information:

- (i) Company name and address where the engine is located.
- (ii) Date of the report and beginning and ending dates of the reporting period.
- (iii) Engine site rating and model year.
- (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v) Hours operated for the purposes specified in §60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(2)(ii) and (iii).
- (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4243(d)(2)(ii) and (iii).
- (vii) Hours spent for operation for the purposes specified in §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]

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

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

(a) The permittee shall comply by purchasing an engine certified to the emission standards in §60.4231(a) through (b), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

**SECTION D. Source Level Requirements**

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(iii) Not applicable.

(b) The permittee shall demonstrate compliance according to the method specified in paragraph (b)(1) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Not applicable.

(c) Not applicable.

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

(1) [Superseded by Group 3, Condition #002]

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a

**SECTION D. Source Level Requirements**

financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

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

(f) Not applicable.

(g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(h) - (i) Not applicable.

VII. ADDITIONAL REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source includes the following natural gas-fired emergency engines:

- (1) One (1) 100 kW natural gas-fired emergency engine installed in 2005, located at Alumni Garage.
- (2) One (1) 100 kW natural gas-fired emergency engine installed in 2018, located at Chandler/Ullmann.
- (3) One (1) 150 kW natural gas-fired emergency engine installed in Dec 2013, located at APC CH&R.
- (4) One (1) 38 kW natural gas-fired emergency engine installed in 2003, located at Coppee Hall.
- (5) One (1) 41 kW natural gas-fired emergency engine installed in 2010, located at EWFM Library.
- (6) One (1) 35 kW natural gas-fired emergency engine installed in 2003, located at Grace Hall.
- (7) One (1) 20 kW natural gas-fired emergency engine installed in 2001, located at Johnson Hall.
- (8) One (1) 19 kW natural gas-fired emergency engine installed in 2005, located at Lambertson Hall.
- (9) One (1) 150 kW natural gas-fired emergency engine installed in 2005, located at Linderman Library.
- (10) One (1) 19 kW natural gas-fired emergency engine installed in 2019, located at Maginnes Hall.
- (11) One (1) 20 kW natural gas-fired emergency engine installed in 2001, located at Neville Hall.
- (12) One (1) 50 kW natural gas-fired emergency engine installed in 2015, located at Packard Lab.
- (13) One (1) 12.5 kW natural gas-fired emergency engine installed in 1972, located at Rathbone Hall.
- (14) One (1) 18.5 kW natural gas-fired emergency engine installed in 1989, located at Rauch Business Center.
- (15) One (1) 80 kW natural gas-fired emergency engine installed in 2016, located at Seely Mudd.
- (16) One (1) 41 kW natural gas-fired emergency engine installed in 2016, located at Sher/Fair Physics.
- (17) One (1) 55 kW natural gas-fired emergency engine installed in 2001, located at Sinclair Lab.
- (18) One (1) 60 kW natural gas-fired emergency engine installed in 2005, located at Sinclair Opto.

**SECTION D. Source Level Requirements**

- (19) One (1) 50 kW natural gas-fired emergency engine installed in 2013, located at Taylor Gym.
- (20) One (1) 55 kW natural gas-fired emergency engine installed in 2000, located at University Center.
- (21) One (1) 54 kW natural gas-fired emergency engine installed in 2018, located at Whitaker Lab.
- (22) One (1) 19 kW natural gas-fired emergency engine installed in 2002, located at Wilbur Drama.
- (23) One (1) 130 kW natural gas-fired emergency engine installed in 2015, located at Williams Hall.
- (24) One (1) 150 kW natural gas-fired emergency engine installed in 2015, located at LTS Packard Lab.
- (25) One (1) 100 kW natural gas-fired emergency engine installed in 2007, located at LTS - EWFM CC.
- (26) One (1) 100 kW natural gas-fired emergency engine installed in 2007, located at LTS - EWFM CC.
- (27) One (1) 100 kW natural gas-fired emergency engine installed in 2003, located at LTS - EWFM CC.
- (28) One (1) 86 kW natural gas-fired emergency engine installed in 2004, located at Transportation Bldg.
- (29) One (1) 130 kW natural gas-fired emergency engine installed in 2005, located at 125 Goodman Dr.
- (30) One (1) 45 kW natural gas-fired emergency engine installed in 2012, located at MTC - CH&R.
- (31) One (1) 55 kW natural gas-fired emergency engine installed before 2005, located at MTC - Bldg H.
- (32) One (1) 30 kW natural gas-fired emergency engine installed in 2007, located at Stabler Arena.
- (33) One (1) 18 kW natural gas-fired emergency engine installed in 2022, located at Rauch Field House.
- (34) One (1) 30 kW natural gas-fired emergency engine installed in 2014, located at Centennial I Res. Halls
- (35) One (1) 19 kW natural gas-fired emergency engine installed before 2005, located at Centennial II Res. Halls
- (36) One (1) 50 kW natural gas-fired emergency engine installed in 2005, located at Drinker.
- (37) One (1) 50 kW natural gas-fired emergency engine installed in 2012, located at M&M/Taylor.
- (38) One (1) 55 kW natural gas-fired emergency engine installed in 2002, located at Campus/Farrington Square.
- (39) One (1) 20 kW natural gas-fired emergency engine installed in 2016, located at Brodhead House.
- (40) One (1) 11.5 kW natural gas-fired emergency engine installed before 2005, located at Alpha Phi #98.
- (41) One (1) 19 kW natural gas-fired emergency engine installed before 2005, located at Phi Delta Theta #97.
- (42) One (1) 13 kW natural gas-fired emergency engine installed before 2012, located at Alpha Gamma Delta #95.
- (43) One (1) 13 kW natural gas-fired emergency engine installed before 2007, located at House #93.
- (44) One (1) 7 kW natural gas-fired emergency engine installed in 2014, located at Kappa Delta #104.
- (45) One (1) 9 kW natural gas-fired emergency engine installed before 2003, located at Umoja #101.
- (46) One (1) 7 kW natural gas-fired emergency engine installed before 2010, located at Alpha Omicron Pi #107.
- (47) One (1) 19 kW natural gas-fired emergency engine installed before 2004, located at Delta Chi #86.
- (48) One (1) 7 kW natural gas-fired emergency engine installed before 2007, located at House #89.
- (49) One (1) 7 kW natural gas-fired emergency engine installed in 2016, located at PSI Upsilon #80.
- (50) One (1) 12 kW natural gas-fired emergency engine installed in 2022, located at Theta Chi #91.
- (51) One (1) 150 kW natural gas-fired emergency engine installed in 2016, located at the Police Station, Building 47.
- (52) One (1) 260 kW natural gas-fired emergency engine installed in 2020, located at the Singleton, Hitch, and Maida Houses
- (53) One (1) 400 kW natural gas-fired emergency engine installed in 2021, located at the Health, Science, and Tech. Bldg.
- (54) One (1) 750 kW natural gas-fired emergency engine installed in 2021, located at the Health, Science, and Tech. Bldg.

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

40 CFR 60 Subpart JJJJ requirements are applicable to only the following emergency engines:

- (1) One (1) 41 kW natural gas-fired emergency engine installed in 2010, located at EWFM Library.
- (2) One (1) 50 kW natural gas-fired emergency engine installed in 2015, located at Packard Lab.
- (3) One (1) 80 kW natural gas-fired emergency engine installed in 2016, located at Seely Mudd.
- (4) One (1) 41 kW natural gas-fired emergency engine installed in 2016, located at Sher/Fair Physics.
- (5) One (1) 130 kW natural gas-fired emergency engine installed in 2015, located at Williams Hall.
- (6) One (1) 150 kW natural gas-fired emergency engine installed in 2015, located at LTS - Packard Lab.
- (7) One (1) 45 kW natural gas-fired emergency engine installed in 2012, located at MTC - CH&R.
- (8) One (1) 30 kW natural gas-fired emergency engine installed in 2014, located at Centennial 1 Res. Halls
- (9) One (1) 50 kW natural gas-fired emergency engine installed in 2012, located at M&M/Taylor.
- (10) One (1) 7 kW natural gas-fired emergency engine installed in 2014, located at House 104.
- (11) One (1) 12 kW natural gas-fired emergency engine installed in 2022, located at Theta Chi.
- (12) One (1) 150 kW natural gas-fired emergency engine installed in Dec 2013, located at APC CH&R.
- (13) One (1) 50 kW natural gas-fired emergency engine installed in Aug 2013, located at Taylor Gym.
- (14) One (1) 150 kW natural gas-fired emergency engine installed in 2016, located at the Police Station, Building 47.

**SECTION D. Source Level Requirements**

- (15) One (1) 7 kW natural gas-fired emergency engine installed in 2016, located at Psi Upsilon #80.
- (16) One (1) 20 kW natural gas-fired emergency engine installed in 2016, located at the Brodhead House.
- (17) One (1) 54 kW natural gas-fired emergency engine installed in 2018, located at Whitaker Lab.
- (18) One (1) 100 kW natural gas-fired emergency engine installed in 2018, located at Chandler/Ullmann.
- (19) One (1) 260 kW natural gas-fired emergency engine installed in 2020, located at Singleton, Hitch and Maida Houses.
- (20) One (1) 400 kW natural gas-fired emergency engine installed in 2021, located at the Health, Science & Technology Building.
- (21) One (1) 750 kW natural gas-fired emergency engine installed in 2021, located at the Health, Science & Technology Building.
- (22) One (1) 18 kW natural gas-fired emergency engine installed in 2022, located at the Rauch Field House.

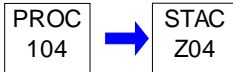
**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: DIESEL-FIRED EMERGENCY GENERATORS (6)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP-2
GROUP-3

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.21]****General**

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

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart III - 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**

(a) Not applicable.

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

[Applicable certified emission limits from §60.4202(a)(2) and §89.112(a)]

(1) Applicable to 750 kW emergency generators:

- (i) NO_x + NMHC emission limit shall be less than 6.4 gm/kW-hr.
- (ii) CO emission limit shall be less than 3.5 gm/kW-hr.
- (iii) PM emission limit shall be less than 0.20 gm/kW-hr.

(2) Applicable to 300 kW emergency generator:

- (i) NO_x + NMHC emission limit shall be less than 4.0 gm/kW-hr.
- (ii) CO emission limit shall be less than 3.5 gm/kW-hr.
- (iii) PM emission limit shall be less than 0.20 gm/kW-hr.

(3) Applicable to 125 kW emergency generator:

- (i) NO_x + NMHC emission limit shall be less than 4.0 gm/kW-hr.
- (ii) CO emission limit shall be less than 5.0 gm/kW-hr.
- (iii) PM emission limit shall be less than 0.30 gm/kW-hr.

(c) - (f) Not applicable.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]**Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine**

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

**SECTION D. Source Level Requirements****Fuel Restriction(s).**

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]
Subpart III - 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**

(a) Not applicable.

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

[Excerpt from 80.510(b)]

(1) Sulfur content.

(i) 15 ppm maximum for NR diesel fuel.

(2) Cetane index or aromatic content, as follows:

(i) A minimum cetane index of 40; or

(ii) A maximum aromatic content of 35 volume percent.

(c) [Reserved]

(d) - (e) Not applicable.

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.

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

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

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

(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

IV. RECORDKEEPING REQUIREMENTS.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) - (b) Not applicable.

(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high

**SECTION D. Source Level Requirements**

backpressure limit of the engine is approached.

(d) Not applicable.

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

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following:

(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

(2) Change only those emission-related settings that are permitted by the manufacturer; and

(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

(b) Not applicable.

(c) The permittee must comply with the emission limits by purchasing an engine certified to the emission standards in §60.4205(b), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications.

(d) - (e) Not applicable.

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

(1) [Superceded by Group 3, Condition #002]

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

**SECTION D. Source Level Requirements**

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

(g) Not applicable.

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

This source includes the following diesel-fired emergency engines:

- (1) One (1) 750 kW diesel-fired emergency engine installed in 2009, located at Steps Bldg.
- (2) One (1) 81 kW diesel-fired emergency engine installed in 1996, located at Zoellner Arts Center.
- (3) One (1) 750 kW diesel-fired emergency engine installed in 2015, located at LTS - EFWF CC.
- (4) One (1) 300 kW diesel-fired emergency engine installed in 2011, located at MTC Iacocca - Fac.
- (5) One (1) 125 kW diesel-fired emergency engine installed in 2011, located at MTC Iacocca - LTS.
- (6) One (1) 50 kW diesel-fired emergency engine installed in 2009, located at Sayre Park Village D.

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

40 CFR Subpart IIII requirements are applicable to only the following emergency engines:

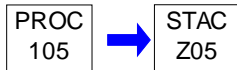
- (1) One (1) 750 kW diesel-fired emergency engine installed in 2009, located at Steps.
- (2) One (1) 750 kW diesel-fired emergency engine installed in 2015, located at LTS - EFWF CC.
- (3) One (1) 300 kW diesel-fired emergency engine installed in 2011, located at Iacocca - Fac.
- (4) One (1) 125 kW diesel-fired emergency engine installed in 2011, located at Iacocca - LTS.

**SECTION D. Source Level Requirements**

Source ID: 105

Source Name: GASOLINE FUEL UNDERGROUND STORAGE TANKS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 001 [25 Pa. Code §129.61]****Small gasoline storage tank control (Stage 1 control)**

(a) A person may not transfer gasoline from a delivery vessel into a stationary gasoline storage tank unless the displaced vapors from the storage tank are transferred to the dispensing delivery tank through a vapor right return line and unless the receiving tank is equipped with a submerged fill pipe which extends from the filling orifice to within 6 inches of the bottom of the tank. The vapors collected in the dispensing tank shall be disposed of in accordance with § 129.59 or § 129.60(c) (relating to bulk gasoline terminals; and bulk gasoline plants).

(b) The dispensing delivery tank shall remain vapor tight at all times. The delivery tank may be opened after the vapors are disposed of in accordance with § 129.59 or § 129.60(c).

VII. ADDITIONAL REQUIREMENTS.

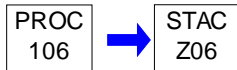
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION D. Source Level Requirements**

Source ID: 106

Source Name: PARTS CLEANERS (3)

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 001 [25 Pa. Code §129.63]****Degreasing operations**

(a) Cold cleaning machines. Except for those subject to the Federal National emissions standards for hazardous air pollutants (NESHAP) for halogenated solvent cleaners under 40 CFR Part 63 (relating to National emission standards for hazardous air pollutants for source categories), this subsection applies to cold cleaning machines that use 2 gallons or more of solvents containing greater than 5% VOC content by weight for the cleaning of metal parts.

(1) Immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater.

(2) Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:

(i) Have a permanent, conspicuous label summarizing the operating requirements in paragraph (3). In addition, the label shall include the following discretionary good operating practices:

(A) Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine.

(B) When a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned.

(C) Work area fans should be located and positioned so that they do not blow across the opening of the degreaser unit.

**SECTION D. Source Level Requirements**

(ii) Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than 6 inches shall constitute an acceptable cover.

(3) Cold cleaning machines shall be operated in accordance with the following procedures:

(i) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

(ii) Flushing of parts using a flexible hose or other flushing device shall be performed only within the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray.

(iii) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine.

(iv) Air agitated solvent baths may not be used.

(v) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.

(4) After December 22, 2002, a person may not use, sell or offer for sale for use in a cold cleaning machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.

(5) On and after December 22, 2002, a person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:

(i) The name and address of the solvent supplier.

(ii) The type of solvent including the product or vendor identification number.

(iii) The vapor pressure of the solvent measured in mm hg at 20°C (68°F).

(6) A person who operates a cold cleaning machine shall maintain for at least 2 years and shall provide to the Department, on request, the information specified in paragraph (5). An invoice, bill of sale, certificate that corresponds to a number of sales, Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this section.

(7) Paragraph (4) does not apply:

(i) To cold cleaning machines used in extreme cleaning service.

(ii) If the owner or operator of the cold cleaning machine demonstrates, and the Department approves in writing, that compliance with paragraph (4) will result in unsafe operating conditions.

(iii) To immersion cold cleaning machines with a freeboard ratio equal to or greater than 0.75.

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP-1

Group Description: Primary Boilers

Sources included in this group

ID	Name
031	B & W 1
032	B & W 2
033	B & W 3
034	KEELER BOILER 1
035	KEELER BOILER 2
036	KEELER BOILER 3

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

001 [25 Pa. Code §123.11]

Combustion units

The concentration of Particulate Matter (expressed as TSP) emitted from each boiler shall not exceed 0.4000 Pounds per Million BTU of Total Suspended Particulate.

002 [25 Pa. Code §123.22]

Combustion units

The concentration of Sulfur Oxides (expressed as SO₂) emitted from each boiler shall not exceed 3.0000 Pounds per Million BTU of Sulfur Dioxide over any 1-hour period.

Fuel Restriction(s).

003 [25 Pa. Code §123.22]

Combustion units

The concentration of Sulfur in the #2 Fuel Oil fired by these boilers shall not exceed 15 ppm (0.0015%) Sulfur by weight, consistent with ASTM D396.

004 [25 Pa. Code §127.444]

Compliance requirements.

(a) These sources shall combust only natural gas or #2 fuel oil.

(b) To be exempt from 40 CFR 63 Subpart JJJJJJ, the boilers shall only be fired on fuel oil during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours, per boiler, during any calendar year. If the 48 hour limit is exceeded for any of the boilers, all boilers shall immediately be subject to all provisions of Subpart JJJJJJ.

Operation Hours Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this condition is also derived from 25 Pa. Code, Section 129.92]

(a) At any time, only two (2) of the three combustion units at the Packer Campus (Source 031, 032 & 033) shall be in simultaneous operation.

(b) At any time, only two (2) of the three combustion units at the Mountain Top Campus (Source 034, 035 & 036) shall be in simultaneous operation.

**SECTION E. Source Group Restrictions.****II. TESTING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

To demonstrate compliance with Source Group Level Condition #003, the permittee shall comply with the following requirements:

(a) The permittee shall perform a quarterly analysis of the No. 2 Fuel Oil used by these sources during quarters when the sources are using No. 2 fuel Oil. A representative sample shall be obtained and tested. The fuel characteristics to be determined shall include, but not be limited to, the following:

- (1) The heating value (in Btu/Lb); and
- (2) The percent (%) sulfur content, by weight.
- (3) The percent (%) ash content, by weight.

Testing shall be done in accordance with 25 Pa. Code, Chapter 139.

(b) If the supplier of the oil can provide certification of the values of the fuel characteristics mentioned in section (a) (specific to each shipment of No. 2 Fuel Oil delivered to the facility), the permittee may substitute such certification (signed and notarized by a responsible official) for the analysis of a representative sample.

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

[Authority for this condition is also derived from 25 Pa. Code, Section 129.92]

- (a) The permittee shall, on a daily basis, monitor the hours of operation of each boiler.
- (b) The permittee shall, on a daily basis, monitor the amount and type of fuel consumed by each boiler.

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

The permittee shall keep records of the hours of operation of these boilers. These, with the records of the heating value, ash content and sulfur content of the #2 fuel oil, shall be used with EPA's AP-42 emission factors to determine compliance with Source Group Level Conditions #001 and #002.

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

The permittee shall record the results of each completed fuel oil analysis and any fuel characteristic certifications. These records, and the quantity of oil consumed by the boilers, shall be used in the calculation of sulfur and particulate matter emissions from these sources.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Authorization for this condition is also derived from 25 Pa. Code, Section 129.93]

(a) The permittee shall record each boiler adjustment conducted in a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:

- (1) The date of the tuning procedure;
- (2) The name of the service company and technicians;
- (3) The final operating rate or load;
- (4) The final CO and NOx emission rates; and

**SECTION E. Source Group Restrictions.**

(5) The final excess oxygen rate.

(b) The permittee shall maintain records including a certification from the fuel supplier of the type of fuel. For residual oils, minimum recordkeeping includes a certification of the nitrogen content of the fuel, and identification of the sampling method and sampling protocol. This testing shall be performed by Lehigh University on a quarterly basis.

(c) The permittee shall make the annual adjustment in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

V. REPORTING REQUIREMENTS.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

To demonstrate compliance with the emission limitations of Source Group Level Conditions #001 & #002, the permittee shall, on an annual basis, compile a Sulfur Dioxide (SO₂) & Particulate Matter (PM) Emissions Report for operations during the preceding year. Using the data recorded in compliance with Source Group Level Condition #006, the permittee shall determine the emissions of SO₂ & PM, to be expressed in units of Lbs/MMBtu. This report shall be submitted to the Department with the annual AIMS submittal.

VI. WORK PRACTICE REQUIREMENTS.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this condition is also derived from 25 Pa. Code, Section 129.93]

(a) The permittee shall perform an annual adjustment or tune up, of the combustion process, for these six (6) boilers (Source ID 031-036) to comply with the NO_x Presumptive RACT. An annual adjustment or tuneup on the combustion process shall include, at a minimum, the following:

(1) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

(2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and to the extent practicable minimize emissions of CO.

(3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

(b) The permittee shall operate and maintain all sources subject to this condition in accordance with good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP-2

Group Description: Miscellaneous Combustion Units

Sources included in this group

ID	Name
102	MISC NATURAL GAS/PROPANE COMBUSTION UNITS (170)
103	NATURAL GAS EMERGENCY GENERATORS (54)
104	DIESEL-FIRED EMERGENCY GENERATORS (6)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Authority for this condition is also derived from 25 Pa. Code, Section 129.93]

To optimize combustion efficiency, the permittee shall operate and maintain these sources in accordance with the manufacturer's specifications and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP-3

Group Description: Emergency Generators

Sources included in this group

ID	Name
103	NATURAL GAS EMERGENCY GENERATORS (54)
104	DIESEL-FIRED EMERGENCY GENERATORS (6)

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

001 [25 Pa. Code §123.13]

Processes

The concentration of Particulate Matter (expressed as TSP) in the emissions from each of these sources shall not exceed 0.0400 grains/dry standard cubic foot of Total Suspended Particulate.

Operation Hours Restriction(s).

002 Elective Restriction

[Authority for this condition is also derived from 25 Pa. Code, Section 129.93]

Presumptive RACT emission limitations are the installation, maintenance and operation of the source in accordance with manufacturers specifications. Each emergency generator must operate less than 200 hours in a consecutive 12-month rolling sum period.

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.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the hours of operation of each emergency generator when in use.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this condition is also derived from 25 Pa. Code Section 129.95]

(a) The permittee shall record the total hours of operation for each individual emergency generator on a monthly basis. The records shall be maintained on-site and be made available upon request by the Department.

(b) The data recorded shall include but not limited to:

(1) The name/designation of the emergency generator.

(2) The hours of operation of each unit.

(3) Dates of operation.

(c) Measurements, records, and other data shall be maintained in accordance with General State Only Condition #020, Section B.

**SECTION E. Source Group Restrictions.****V. REPORTING REQUIREMENTS.**

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

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Authority for this condition is also derived from 25 Pa. Code Section 129.93]

The presumptive RACT shall be the maintenance and operation of the sources in accordance with manufacturer's specification and the sources shall also be operated and maintained in accordance with good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description			
031	B & W 1			
Emission Limit				Pollutant
3.000	Lbs/MMBTU	over any 1-hour period		SO2
0.400	Lbs/MMBTU			TSP
032	B & W 2			
Emission Limit				Pollutant
3.000	Lbs/MMBTU	over any 1-hour period		SO2
0.400	Lbs/MMBTU			TSP
033	B & W 3			
Emission Limit				Pollutant
3.000	Lbs/MMBTU	over any 1-hour period		SO2
0.400	Lbs/MMBTU			TSP
034	KEELER BOILER 1			
Emission Limit				Pollutant
3.000	Lbs/MMBTU	over any 1-hour period		SO2
0.400	Lbs/MMBTU			TSP
035	KEELER BOILER 2			
Emission Limit				Pollutant
3.000	Lbs/MMBTU	over any 1-hour period		SO2
0.400	Lbs/MMBTU			TSP
036	KEELER BOILER 3			
Emission Limit				Pollutant
3.000	Lbs/MMBTU	over any 1-hour period		SO2
0.400	Lbs/MMBTU			TSP

Site Emission Restriction Summary

Emission Limit	Pollutant
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**SECTION H. Miscellaneous.**

The Operating Permit application for this facility was received by the Department on June 7, 2021. The annual operating permit maintenance fee shall be submitted to the Department in accordance with 25 Pa. Code, Chapter 127, Section 127.703. The annual maintenance fees are due no later than December 31, annually.

The following is a list of sources that have been determined by the Department to be of minor significance under 25 Pa. Code, Chapter 127, Section 127.14(a)(8) and are not regulated in this State-Only Operating Permit. However, this determination does not exempt the sources from compliance with all applicable air quality regulations specified in 25 Pa. Code Chapters 121-143:

Packer Campus Bldg. 19, Packard Lab - Engine Teaching Lab:

4-Cylinder Automotive Gasoline Engine

8-Cylinder Automotive Gasoline Engine

Yamaha Motorcycle Gasoline Engine

8-HP Briggs-Stratton Lawn Mower Gasoline Engine

10-HP Single-Cylinder Diesel Engine

Packer Campus Bldg.19, Packard Lab - Boiler Room:

Kerosene Jet Engine

Requests for Determination (RFD's) include:

48-0574a issued on 11/3/09

48-0631 issued on 9/29/11

48-0634 issued on 10/28/11

48-0656 issued on 8/30/12

48-0693 issued on 8/9/13

48-0694 issued on 8/9/13

48-0695 issued on 8/9/13

48-0729 issued on 4/22/14

78-0745 issued on 9/29/14

48-0754 issued on 12/23/14

48-0810 issued on 4/6/16

48-0820 issued on 6/1/16

48-0824 issued on 7/1/16

48-0825 issued on 7/22/16

48-0867 issued on 6/7/2017

48-0892 issued on 2/26/2018

48-0915 issued on 10/5/208

48-0942 issued on 8/12/2019

48-0951 issued on 11/25/2019

e8267 issued on 8/7/2020

e8588 issued on 8/7/2020

10203 issued 4/28/2023 - Installation of a 300 kW natural gas-fired Emergency Generator at the Clayton Univeristy Center on the Asa Parker Campus.

This permit includes conditions from GP 39-302-187.

The Minor Modification is for the conversion of six boilers from combusting natural gas/No.6 fuel oil to natural gas/No.2 fuel oil.



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