



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

STATE ONLY SYNTHETIC MINOR OPERATING PERMIT

Issue Date: December 8, 2025

Effective Date: December 8, 2025

Expiration Date: December 8, 2030

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: 39-00109

Synthetic Minor

Federal Tax Id - Plant Code: 63-0673043 -2

Owner Information

Name: EVONIK CORP  
Mailing Address: 7001 HAMILTON BLVD  
ALLENTOWN, PA 18195

Plant Information

Plant: EVONIK CORP/UPPER MACUNGIE  
Location: 39 Lehigh County 39920 Upper Macungie Township  
SIC Code: 8731 Services - Commercial Physical Research

Responsible Official

Name: JACKSON FORD  
Title: SITE MANAGER  
Phone: (610) 573 - 5206 Email: jackson.ford@evonik.com

Permit Contact Person

Name: DAVID MEST  
Title: SITE SAFETY MANAGER  
Phone: (610) 573 - 5103 Email: david.mest@evonik.com

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



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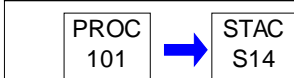
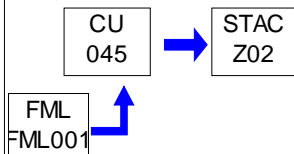
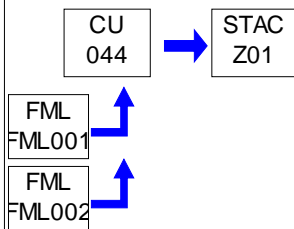
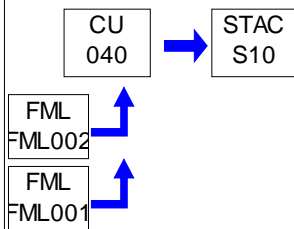
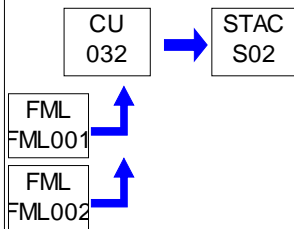
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Source ID	Source Name	Capacity/Throughput	Fuel/Material
032	R&D 1 CLEAVER BROOKS BOILERS (2)	49.000 MMBTU/HR	
040	R&D 3 CLEAVER BROOKS BOILERS (2)	41.900 MMBTU/HR	
044	SPACE HEATERS (3)	2.200 MMBTU/HR	
045	EMERGENCY GENERATORS (2)	3.800 MMBTU/HR	
101	R&D PROJECTS & SPRAY BOOTHS		
102	GENERAL R&D FUME HOOD VENTILATION		
FML001	#2 FUEL OIL STORAGE		
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S02	R&D 1 CLEAVER BROOKS BOILERS STACK		
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S14	R&D STACKS		
Z01	SPACE HEATERS FUGITIVE EMISSIONS		
Z02	EMERGENCY GENERATORS FUGITIVE EMISSIONS		

**PERMIT MAPS**

**PERMIT MAPS**PROC  
102STAC  
S14

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

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

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

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

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

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

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

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

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

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

(1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.

(2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.

(4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

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

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

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



**SECTION B. General State Only Requirements**

precluded by the Clean Air Act or its regulations.

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

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

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

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

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

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

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

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

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

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

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

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

(2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> at the facility during the term of the permit.

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

(4) Six-tenths of a ton of PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

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

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

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

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

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

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

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

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit modifications)
- (7) Subchapter H (relating to general plan approvals and general operating permits)

**SECTION B. General State Only Requirements****#015 [25 Pa. Code § 127.11a]****Reactivation of Sources**

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

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

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

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

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

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

- (a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.
- (b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.
- (c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:
- Regional Air Program Manager  
PA Department of Environmental Protection  
(At the address given in the permit transmittal letter, or otherwise notified)
- (d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.
- (e) Any records, reports or information submitted to the Department shall be available to the public except for such records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

**SECTION B. General State Only Requirements****#019 [25 Pa. Code §§ 127.441(c) & 135.5]****Sampling, Testing and Monitoring Procedures.**

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

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

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

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

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

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

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

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

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

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

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

**#023 [25 Pa. Code § 121.7]****Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§ 4001-4015).

**SECTION B. General State Only Requirements****#024 [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.

**#025 [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 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**

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

**# 004 [25 Pa. Code §123.41]****Limitations**

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

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

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

If at any time the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the revisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such

**SECTION C. Site Level Requirements**

time as it notifies the company that testing is required.

**# 006 [25 Pa. Code §139.1]****Sampling facilities.**

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

**# 007 [25 Pa. Code §139.11]****General requirements.**

The following are applicable to source tests for determining emissions from stationary sources:

(1) Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) The Department will consider for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum all of the following:

- (i) A thorough source description, including a description of any air cleaning devices and the flue.
- (ii) Process conditions, for example, the charging rate of raw material or rate of production of final product, boiler pressure, oven temperature, and other conditions which may affect emissions from the process.
- (iii) The location of the sampling ports.
- (iv) Effluent characteristics, including velocity, temperature, moisture content, gas density (percentage CO, CO<sub>2</sub>, O<sub>2</sub> and N<sub>2</sub>), static and barometric pressures.
- (v) Sample collection techniques employed, including procedures used, equipment descriptions and data to verify that isokinetic sampling for particulate matter collection occurred and that acceptable test conditions were met.
- (vi) Laboratory procedures and results.
- (vii) Calculated results.

**III. MONITORING REQUIREMENTS.****# 008 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

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

The permittee shall monitor the quantity and type of fuel burned. The type of fuel shall be determined by certified fuel tests provided by the supplier or through certified testing conducted through the permittee. The testing shall, at a minimum, detail the sulfur content of the fuel.

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

- (a) A visual inspection of the facility shall be performed on a weekly basis to determine if fugitive or visible emissions are detectable at the facility.
- (b) If visible emissions are observed, the permittee shall immediately attempt to correct the source of the visible emissions. If the source of the visible emissions cannot be corrected immediately, the facility will report the incident of the visible emission to the Department within four hours of each incident and make arrangements for a certified observer to

**SECTION C. Site Level Requirements**

verify the opacity of the visible emissions.

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

The permittee shall maintain a file containing all records and other data that are required to be collected, for all NO<sub>x</sub> sources, pursuant to the various provisions of the operating permit, 25 Pa. Code Section 129.95, such that records provide sufficient data and calculations to clearly demonstrate that the requirements of 25 Pa. Code Section 129.91-94 are met. The file shall include, but not be limited to: for all boilers and space heaters, record fuel consumption on a monthly basis, and express fuel consumption in tons of NO<sub>x</sub> emitted using the current AP-42 Emission Factors for fuel oil combustion and/or natural gas combustion. NO<sub>x</sub> emissions shall be recorded on a monthly and yearly basis. For all R & D projects with NO<sub>x</sub> emissions greater than 5 lb. NO<sub>x</sub>/Day/Project, calculate monthly NO<sub>x</sub> emissions to demonstrate compliance with NO<sub>x</sub> limitations of this operating permit. All measurements, records and other data required to be maintained by the company shall be retained for at least five years following the date on which such measurements records or data are located.

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

The company shall maintain a file containing all records and other data that are required to be collected, for all VOC sources, pursuant to the various provisions of this operating permit, 25 Pa. Code Section 129.95, such that records provide sufficient data and calculations to clearly demonstrate that the requirements of 25 Pa. Code Section 129.91-94 are met. The file shall include, but not be limited to: for all spraybooths operations with VOC emissions greater than 5 lb. VOC/Day/Operation, record hours of operation and material consumption directly relating to VOC emissions on a daily basis, and record total VOC emissions on a monthly and yearly basis. For all R & D Projects with VOC emissions greater than 5 lb. VOC/Day/Project, record sufficient data to calculate VOC emissions on a monthly and yearly basis. VOC emissions from all combustion sources (i.e. boilers, space heaters, and emergency generators) shall be calculated and recorded on a yearly basis. All measurements, records and other data required to be maintained by the company shall be retained for at least five years following that data on which such measurements, records or data are located.

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

The permittee shall maintain a record of the results of the facilities visible and fugitive emission inspections. At a minimum, the permittee shall record the date, time, results of the inspection, and individual conducting the inspection.

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

The permittee shall maintain fuel certification, fuel usage, and facility emission records at the facility. These records shall be updated on a monthly basis and the emissions shall be calculated on a 12-month rolling sum. All records shall be maintained for a period of not less than 5 years and shall be made available to the Department upon request.

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

The permittee, within one (1) hour of knowledge of occurrence, shall notify the Department at 610-861-2070 (Bethlehem), of any malfunction, record keeping or reporting errors, or other possible non-compliance issues, which result in, or may be possibly be resulting in, the emission of air contaminants in excess of the limitation specified in, or established pursuant to, any applicable rule or regulations contained in Article III of the Rule 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, record keeping, 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.

**VI. WORK PRACTICE REQUIREMENTS.****# 016 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(c) The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions



**SECTION C. Site Level Requirements**

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.

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

The use of any in-plant roads associated with the aforementioned source(s) shall not result in the emission of fugitive particulate matter in excess of the limitation specified in section 123.1 and 123.2 of the Rules and Regulations of the Department of Environmental Protection.

**# 018 [25 Pa. Code §129.14]****Open burning operations**

- (b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:
- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
  - (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
  - (3) The emissions interfere with the reasonable enjoyment of life or property.
  - (4) The emissions cause damage to vegetation or property.
  - (5) The emissions are or may be deleterious to human or animal health.

**VII. ADDITIONAL REQUIREMENTS.****# 019 [25 Pa. Code §123.42]****Exceptions**

The limitations of Site Condition #004 shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in Site Condition #001 (relating to prohibition of certain fugitive emissions).

**# 020 [25 Pa. Code §129.14]****Open burning operations**

- (c) Exceptions: The requirements of subsection (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

**SECTION C. Site Level Requirements**

- (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.
- (6) A fire set solely for recreational or ceremonial purposes.
- (7) A fire set solely for cooking food.

**# 021 [25 Pa. Code §129.14]****Open burning operations**

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

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

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

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

- (2) NOT APPLICABLE

(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.

**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.

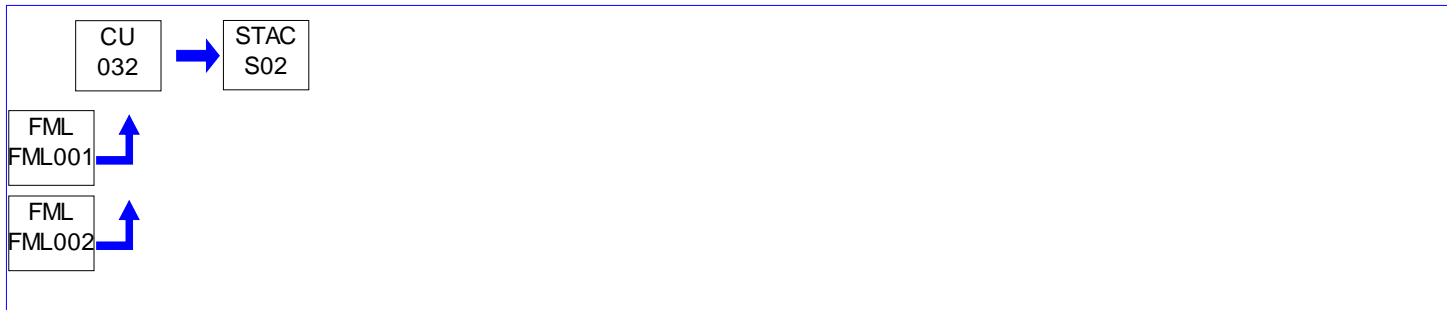
**SECTION D. Source Level Requirements**

Source ID: 032

Source Name: R&amp;D 1 CLEAVER BROOKS BOILERS (2)

Source Capacity/Throughput: 49.000 MMBTU/HR

Conditions for this source occur in the following groups: 01

**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).

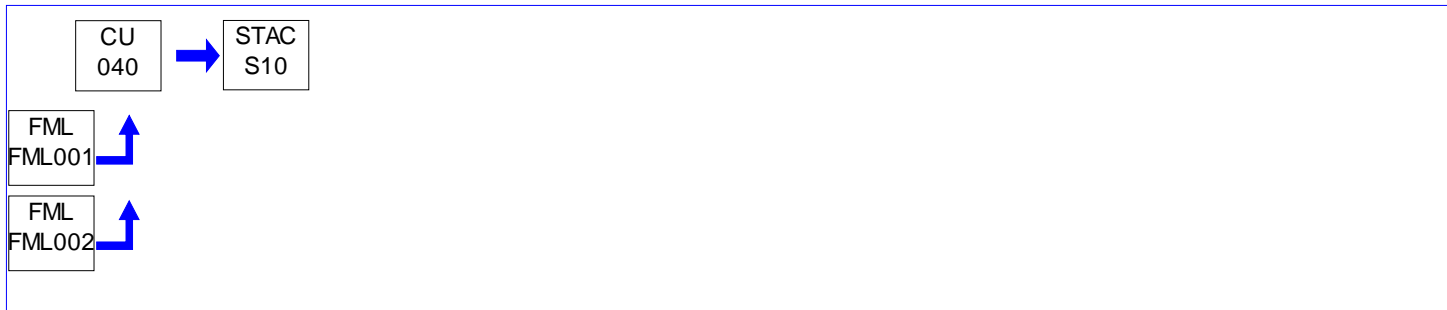
**SECTION D. Source Level Requirements**

Source ID: 040

Source Name: R&amp;D 3 CLEAVER BROOKS BOILERS (2)

Source Capacity/Throughput: 41.900 MMBTU/HR

Conditions for this source occur in the following groups: 01

**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**

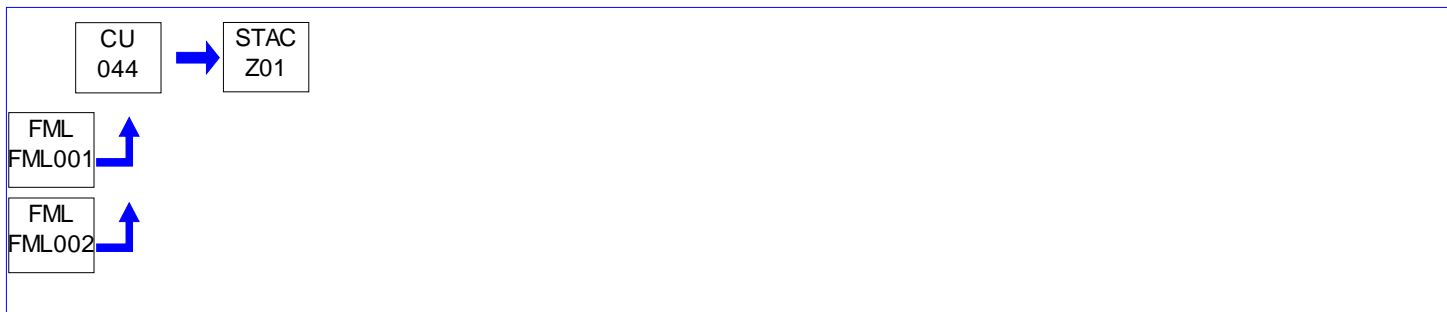
Source ID: 044

Source Name: SPACE HEATERS (3)

Source Capacity/Throughput:

2.200 MMBTU/HR

Conditions for this source occur in the following groups: 01

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

# 001 [25 Pa. Code §123.13]

**Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from Source ID 044 in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

**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).

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

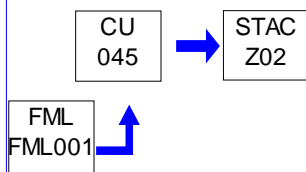
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 045

Source Name: EMERGENCY GENERATORS (2)

Source Capacity/Throughput: 3.800 MMBTU/HR

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

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

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

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

**Fuel Restriction(s).****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The emergency generators are to be fired on only #2 fuel oil.

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

The emergency generators shall be limited to an annual facility-wide output of 644,000 kw hr/yr (12 month rolling average).

**II. TESTING REQUIREMENTS.**

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

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

Each emergency generator shall utilize a hour meter to record hours of operation. These records shall contain hours of operation monthly and made available to the Department upon request.

**IV. RECORDKEEPING REQUIREMENTS.****# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

**SECTION D. Source Level Requirements**

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.

**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

(f) You 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. If the engine is used for the purpose specified in § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

**V. REPORTING REQUIREMENTS.****# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(e) You must report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

**VI. WORK PRACTICE REQUIREMENTS.****# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate continuous compliance with each requirement in Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

**# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for the purpose specified in paragraph (f)(2)(i) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE 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,



**SECTION D. Source Level Requirements**

state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii)-(iii) [Reserved]

(3) NOT APPLICABLE

(4) Emergency stationary RICE located at area sources of HAP 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 provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) 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 financial arrangement with another entity.

(i) NOT APPLICABLE

(ii) 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.

**VII. ADDITIONAL REQUIREMENTS.**

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

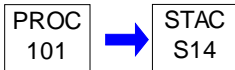
**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: R&amp;D PROJECTS &amp; SPRAY BOOTHS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 02

**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).

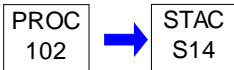
**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: GENERAL R&amp;D FUME HOOD VENTILATION

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 02

**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 E. Source Group Restrictions.**

Group Name: 01

Group Description: Boilers &amp; Space Heaters

Sources included in this group

ID	Name
032	R&D 1 CLEAVER BROOKS BOILERS (2)
040	R&D 3 CLEAVER BROOKS BOILERS (2)
044	SPACE HEATERS (3)

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

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

**# 002 [25 Pa. Code §123.22]****Combustion units**

A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO<sub>2</sub>, from a combustion unit in excess of the rate of 3 pounds per million Btu of heat input over a 1-hour period.

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

Cumulative NO<sub>x</sub> RACT emissions for all boilers and space heaters shall be limited to 11 tons NO<sub>x</sub> per month.

**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Facility-wide cumulative NO<sub>x</sub> emissions from all boilers and space heaters shall never exceed 34 tons per year (12 month rolling average).

**Fuel Restriction(s).****# 005 [25 Pa. Code §123.22]****Combustion units**

The sulfur content of the #2 fuel oil may not exceed 0.0015% by weight (15 ppm).

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

All boilers and space heaters are to be fired only on natural gas or #2 fuel oil to which there has been no reclaimed or waste oil or other waste materials added.

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

(a) The combustion units shall only fire natural gas except during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on fuel oil. Periodic testing, maintenance, or operator training on fuel oil shall not exceed a combined total of 48 hours during any calendar year.

(b) If the conditions described above are not met, the facility shall immediately comply with the requirements of 40 CFR Part 63 Subpart JJJJJJ. The requirements of 40 CFR Part 63 Subpart JJJJJJ will remain in effect throughout the remaining term of the permit.

**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).

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

Whenever the combustion units are fired on anything other than natural gas, the facility shall keep records of the hours of operation and type of fuel used.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]****Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.****# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c]****Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Applicability and delegation of authority.**

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

**SECTION E. Source Group Restrictions.**

Group Name: 02

Group Description: R &amp; D

Sources included in this group

ID	Name
101	R&D PROJECTS & SPRAY BOOTHS
102	GENERAL R&D FUME HOOD VENTILATION

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

NOx RACT for the R &amp; D projects shall be limited to: One (1) ton NOx per year per project.

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

VOC RACT for all spray booth operations shall be limited to:

- (a) Less than 3 lb. VOC per hour per operation.
- (b) Less than 15 lb. VOC per day per operation.
- (c) Less than 2.7 tons VOC per year per operation.

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

VOC RACT for R &amp; D projects shall be limited to: Less than 2.7 tons VOC per year per project.

**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Facility-wide cumulative NOx emissions from all R &amp; D projects shall never exceed 10 tons NOx per year.

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

Facility-wide cumulative VOC emissions from all spray booth operations shall never exceed 2.7 tons per year.

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

Facility-wide cumulative VOC emissions from all R &amp; D projects shall never exceed 35 tons per year.

**II. TESTING REQUIREMENTS.**

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

**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).

**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.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this State Only facility.



**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.

**SECTION H. Miscellaneous.**

The Operating Permit renewal application was received on June 3, 2025. The annual Operating Permit maintenance fee shall be submitted to the Department in accordance with 25 Pa. Code, Chapter 127, Section 127.703 (Section B, Condition #004(a) of this Operating Permit). The annual maintenance fees are due no later than December 31, annually.

Request for Determination (RFD) 39-0875 was approved on February 27, 2017 for the transfer of the miscellaneous sources from Air Products.

The following is a list of sources that have been determined by the Department to be of minor significance. However, these determinations do not exempt the sources from compliance with all applicable air quality regulations specified in 25 Pa. Code Chapters 121-143. All air contamination sources must be operated in a manner consistent with the manufacturer's specifications and good engineering practice. Any sources claiming an exemption based on rated capacity or emission thresholds must keep adequate records to clearly demonstrate to the Department that the applicable thresholds are not exceeded. These records must be kept for five years and be made available to the Department upon request.

Edge-Sweets BT 40 Foam Machine  
Hi Tech Foam Machine  
Small Scale Pilot Development Unit



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

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