



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

STATE ONLY SYNTHETIC MINOR OPERATING PERMIT

Issue Date: May 21, 2021
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Effective Date: April 2, 2026
Expiration Date: May 20, 2026

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: 09-00196

Synthetic Minor

Federal Tax Id - Plant Code: 20-3728898-2

Owner Information

Name: ABINGTON RELDAN METALS LLC
Mailing Address: 550 OLD BORDENTOWN RD
FAIRLESS HILLS, PA 19030-4510

Plant Information

Plant: ABINGTON RELDAN METALS LLC/FAIRLESS HILLS
Location: 09 Bucks County 09002 Falls Township
SIC Code: 3399 Manufacturing - Primary Metal Products, Nec

Responsible Official

Name: MICHAEL RANDOLPH
Title: VP OF OPERATIONS
Phone: (267) 316 - 2000 Email: MRandolph@armetals.com

Permit Contact Person

Name: DENNIS HUACON
Title: SENIOR ENV MGR
Phone: (267) 316 - 2000 Ext.119 Email: dhuacon@armetals.com

[Signature] _____
JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



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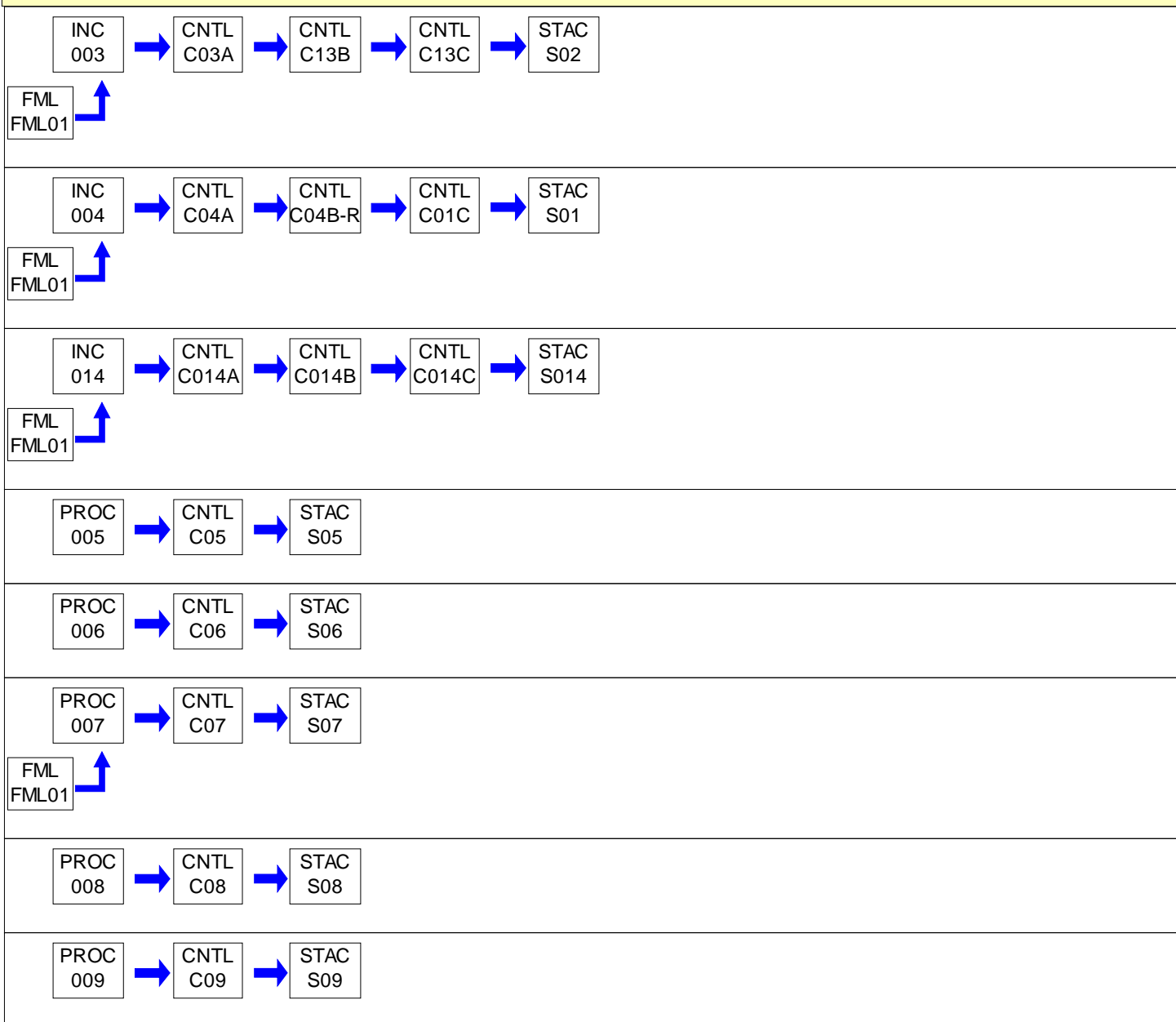
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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
003	THERMAL DESTRUCTOR 3 (LAKE CITY)		
004	THERMAL DESTRUCTOR 4 (PENN RAM 450)		
014	THERMAL DESTRUCTOR 5 (PENNRAM 550)	N/A	RECOVERY MATERIAL
005	SMALL BALL MILLS & SIFTERS		
006	LARGE BALL MILLS & SIFTERS		
007	SMALL MELT FURNACES		
008	MELT FURNACE AREA #2		
009	TILT MELT FURNACES		
010	ACID ROOM PROCESS		
011	STRIP ROOM/ CYANIDE ROOM		
020	SHREDDER (GRANULATOR)		
201	EMERGENCY GENERATOR	7.800 MMBTU/HR	
C014A	AFTERBURNER DESTRUCTOR 5 (PENNRAM 2)		
C014B	BAGHOUSE DESTRUCTOR 5 (PENNRAM 2)		
C014C	SCRUBBER DESTRUCTOR 5 (PENNRAM 2)		
C01C	SCRUBBER 1 (FOR DESTRUCTOR 4)		
C03A	AFTERBURNER 3 (FOR DESTRUCTOR 3)		
C04A	AFTERBURNER 4 (DESTRUCTOR 4)		
C04B-R	REPLACEMENT BAGHOUSE THERMAL DESTRUCTOR 4		
C05	SMALL BALL MILL BAGHOUSE (BALL MILL 005)		
C06	LARGE BALL MILL BAGHOUSE (BALL MILL 006)		
C07	SMALL MELT FURNACE BAGHOUSE (BAGHOUSE #3)		
C08	MELT FURNACE AREA #2 BAGHOUSE (BAGHOUSE #2)		
C09	TILT MELT FURNACE BAGHOUSE (BAGHOUSE #1)		
C11	ACID ROOM GENERAL SCRUBBER		
C12	STRIP ROOM GENERAL SCRUBBER		
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C13C	SCRUBBER 3 FOR DESTRUCTOR 3		
C20	SHREDDER BAGHOUSE		
C21	ACID ROOM NOX SCRUBBER		
FML01	NATURAL GAS		
FML02	DIESEL FUEL		
S01	THERMAL DESTRUCTOR 2&4 STACK		
S014	STACK DESTUCTOR 5 (PENNRAM 2)		
S02	THERMAL DESTRUCTOR 3 STACK		
S05	SMALL BALL MILL STACK 5		
S06	LARGE BALL MILL STACK 6		
S07	SMALL MELT FURNACE STACK		
S08	MELT FURANCE AREA #2 STACK		

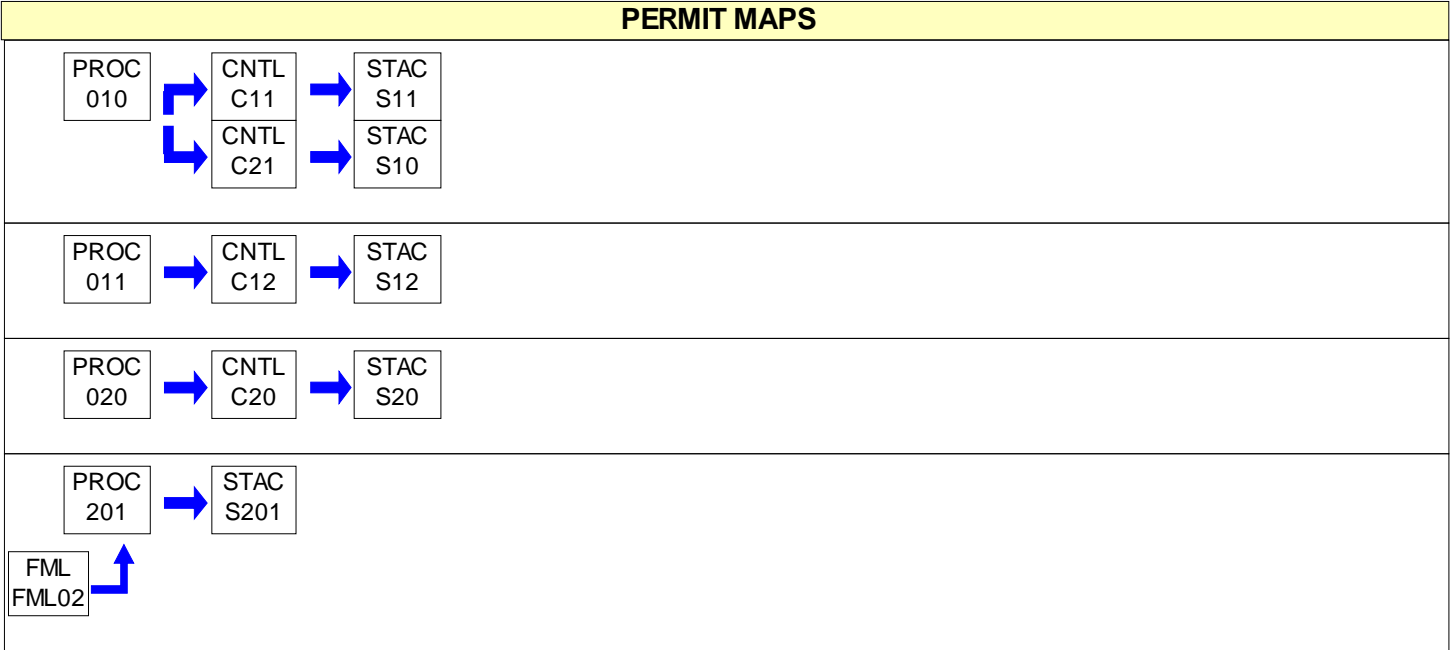
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S09	TILT MELT FURNACE STACK		
S10	ACID ROOM NOX SCRUBBER STACK		
S11	ACID ROOM GENERAL SCRUBBER STACK		
S12	STRIP ROOM GENERAL SCRUBBER STACK		
S20	SHREDDER STACK		
S201	EMERGENCY GENERATOR STACK		

PERMIT MAPS



PERMIT MAPS



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

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

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

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

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

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

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

- (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_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:

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

**SECTION B. General State Only Requirements**

(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, as specified in 25 Pa. Code § 129.14.
- (7) N/A
- (8) N/A
- (9) Sources and classes of sources other than those identified in (1)-(8) of this condition, for which the permittee 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 25 Pa. Code § 123.1(a) (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:

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

005 [25 Pa. Code §123.42]**Exceptions**

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions).

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

The permittee shall not exceed the following facility-wide emission limitations, on a 12-month rolling sum basis, for all emitting sources (including the sources listed in Section H of this permit):

**SECTION C. Site Level Requirements**

- (a) Total NOx emissions ---- 24.9 ton/yr,
- (b) Total VOC emissions ---- 24.9 ton/yr,
- (c) Any single HAP emissions ---- 9.9 ton/yr, and
- (d) Total combined HAP emissions ---- 24.9 ton/yr.

007 [25 Pa. Code §129.14]**Open burning operations**

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

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

Throughput Restriction(s).**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall accept and process recyclable materials, which contain economically significant amounts of any precious metal as identified in 40 CFR Part 266 Subpart F - Recyclable Materials Utilized for Precious Metal Recovery.
- (b) The permittee shall operate this facility in accordance with the requirements specified in General Permit for PROCESSING OF WASTE ELECTRONICS (No. WMGR081D002A under the current Residual Waste Operation program).

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

(a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both AQ Program Manager of the Southeast Regional Office and PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns regarding source testing submissions can be sent to the PSIMS Administrator.

Southeast Region
RA-EPSEstacktesting@pa.gov

PSIMS Administrator (in Central Office)
RA-EPstacktesting@pa.gov

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

1. Test Date(s)

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

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also

**SECTION C. Site Level Requirements**

include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

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

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

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

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

(c) The Department reserves the right to require exhaust stack testing of sources and control devices as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with applicable requirements.

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

[Additional authority under 25 Pa. Code § 139.1]

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 a source. The Department will set forth, in the request, the time period in which the facilities shall be provided as well as the specifications for such facilities.

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

Plan Approval No. 09-0196N requires a source test to confirm compliance for Source ID 014 with the requirements of the emission limits in Section D, Source ID 041, Conditions #001, 002, 003; and the operational requirements in Section D, Source ID 0014, Conditions # 005 and 011 of this permit. A source test was conducted on July 22-24, 2025, and the source test report was received by DEP on 9/17/2025. The permittee's test report received on 9/17/2025 indicates that the source test results demonstrate compliance with plan approval requirements; however, DEP Source Testing Program has not completed a formal review of the source test report to determine if the test results are acceptable to use for compliance purposes at this time. Plan Approval No. 09-0196N terms and conditions are incorporated into this permit based upon a preliminary review of the source test report. If DEP Source Testing Program determines that the source test is not acceptable to use for compliance purposes, the permittee will be required to retest in accordance with conditions specified in Plan Approval No. 09-0196N and other such conditions, within the capacity of the equipment, which may be requested by DEP.

III. MONITORING REQUIREMENTS.**# 013 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

(a) A device approved by the Department and maintained to provide accurate opacity measurements; or

**SECTION C. Site Level Requirements**

(b) Observers trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

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

(a) The permittee shall monitor the facility, once per operating day, for the following:

- (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
- (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:

- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee;
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

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

(a) The permittee shall maintain a record of the facility-wide natural gas usage, monthly and annually.

(b) The permittee shall calculate and maintain the facility-wide emission records for the following, monthly and on a 12-month rolling sum basis:

- (1) total NO_x emissions,
- (2) total VOC emissions,
- (3) any single HAP emissions, and
- (4) total combined HAP emissions.

based on the fuel usage, the hours of operation, the emission factors from the latest stack test results, and/or the amount/type/content of materials processed.

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

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

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

**SECTION C. Site Level Requirements****# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall maintain a record of recyclable materials processed at this facility as specified in the General Permit for PROCESSING OF WASTE ELECTRONICS, that, at a minimum, includes the following:

- (1) Date, amount and type of materials received.
- (2) Any analytical test results provided by the supplier.

(b) The permittee shall maintain a record of precious metals recovered that includes the following:

- (1) Monthly production and type of precious metals recovered (in solid, liquid or sludge form).
- (2) Any analytical test results of the recovered precious metals.

018 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

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

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

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

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

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

- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under 40 CFR § 68.130; or,
 - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If this facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR §

**SECTION C. Site Level Requirements**

68.10(a); or,

(2) Certify that this facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If this facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When this facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if the permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

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

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to DEP's 24-hour Emergency Hotline at 800.541.2050. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

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

(c) The report shall describe the following:

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

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

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

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

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

**SECTION C. Site Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 021 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified in 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

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

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

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

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

- (a) All materials delivered to the facility and/or processed at the facility shall be stored indoors or in closed containers (outdoors), so that no materials are released to the atmosphere.
- (b) All materials transported from the facility shall be totally enclosed or covered so that no materials are released to the atmosphere during transportation.

024 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

025 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

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

VII. ADDITIONAL REQUIREMENTS.

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

VIII. COMPLIANCE CERTIFICATION.

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



SECTION C. Site Level Requirements

IX. COMPLIANCE SCHEDULE.

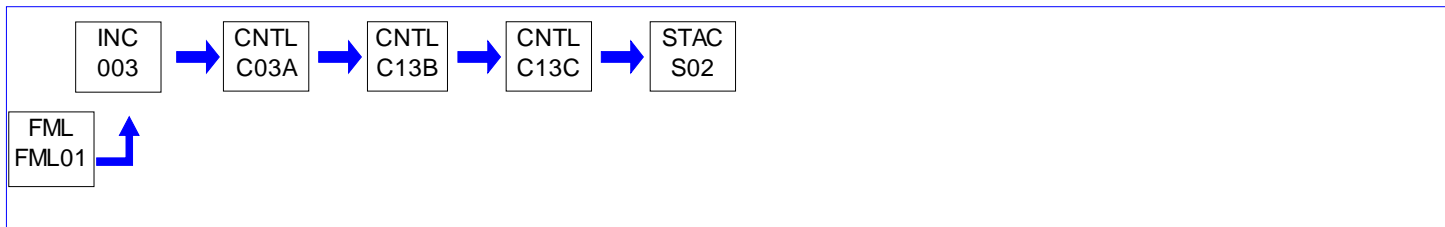
No compliance milestones exist.

**SECTION D. Source Level Requirements**

Source ID: 003

Source Name: THERMAL DESTRUCTOR 3 (LAKE CITY)

Source Capacity/Throughput:

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

Hourly emissions of the listed pollutants below from this source shall not exceed the following limits:

- (a) NO_x emissions: 0.84 lb/hr
- (b) Hg (Mercury) emissions: 0.0023 lb/hr (or 1.044 grams/hr)
- (c) Pb (Lead) emissions: 0.001 lb/hr (or 0.454 grams/hr)
- (d) HCl emissions: 1.10 lb/hr

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

- (a) VOC emissions discharged to the atmosphere from this source shall not exceed 20 ppmvd, on a dry basis as methane (corrected at 7% oxygen), or with a minimum VOC removal efficiency of 95%.
- (b) PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source shall not exceed 0.02 gr/dscf, corrected at 7% oxygen, as measured by EPA Method 5.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13.]

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

- (a) Only natural gas shall be used as fuel for the destructor primary chamber(s).
- (b) Only natural gas shall be used as fuel for the afterburner.

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

- a) The emissions from this thermal destructor shall be directed through the following air pollution control system in the order listed below:
 - (1) Afterburner: a minimum exhaust gas temperature of 1800°F, or the minimum temperature that was obtained during the most recent performance test which demonstrates compliance and was approved by the Department;
 - (2) Baghouse: pressure drop across the baghouse in the range of 0.01" to 6.0" w.c.;
 - (3) Scrubber:
 - a maximum exhaust gas temperature of 150°F,
 - a minimum scrubber solution flow rate of 110 gallons/min, and
 - a minimum scrubber solution pH of 7.3.
- (b) The blower fan has a rated capacity of 1,240 scfm.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

(b) The stack test shall, at a minimum, test and/or monitor for the following:

- (1) NO_x, using EPA Method 7E
- (2) VOC, using EPA Method 25A
- (3) Lead (Pb) and mercury (Hg), using EPA Method 29
- (4) HCl, using EPA Method 320 or 26A
- (5) Temperature of primary chamber and afterburner exhaust gas
- (6) pH of the scrubber solution
- (7) Flow rate of the scrubber solution
- (8) Temperature of the scrubber exhaust gas
- (9) Pressure drop across the baghouse
- (10) Type and amount of material(s) processed
- (11) Incineration duration and average destruction rate (lb/hr)

The stack test shall be conducted in accordance with the provisions of EPA Methods or other Department approved methodology and 25 Pa. Code Chapter 139.

(c) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be emailed to the Regional Air Quality Manager and the PSIMS Administrator for approval (Condition #011 in Section C of this permit).

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

For this Thermal Destructor and its associated control system, the permittee shall monitor the following operating parameters when it is in operation:

- (a) Temperature of the afterburner exhaust gas continuously (at a minimum, one data point per one minute).
- (b) Temperature of the scrubber exhaust gas continuously (at a minimum, one data point per one minute).
- (c) Pressure drop across the baghouse, once per shift.
- (d) Flow rate of the scrubber solution, once per shift.
- (e) Scrubber solution pH, once per shift.

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

For this Thermal Destructor and its associated control system, the permittee shall monitor the following operating parameters when it is in operation:

**SECTION D. Source Level Requirements**

- (a) The weight before and after each destruction cycle (per batch).
- (b) The time at the start and end of each destruction cycle,
- (c) The duration of each destruction cycle.
- (d) The incineration rate (charge weight divided by destruction cycle time, lb/hr)
- (e) The operating hours, daily and monthly.
- (f) The name and/or lot number, type and amount of material processed, per batch, daily, and monthly

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

For this Thermal Destructor and its associated control system, the permittee shall record the following, when it is in operation:

- (a) Temperature of the afterburner exhaust gas continuously, as a five-minute block average (an average of five data points for a period of five minutes).
- (b) Temperature of the scrubber exhaust gas continuously (at a minimum, one data point per five minute).
- (c) Pressure drop across the baghouse, once per shift.
- (d) Flow rate of the scrubber solution, once per shift.
- (e) Scrubber solution pH, once per shift.

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

For this Thermal Destructor and its associated control system, the permittee shall record the following, when it is in operation:

- (a) The weight before and after each destruction cycle (per batch).
- (b) The time at the start and end of each destruction cycle,
- (c) The duration of each destruction cycle.
- (d) The incineration rate (charge weight divided by destruction cycle time, lb/hr)
- (e) The operating hours, daily and monthly.
- (f) The name and/or lot number, type and amount of material processed, per batch, daily, and monthly

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

For this Thermal Destructor, the permittee shall maintain the following calculated emission records on monthly and a 12-month rolling sum basis:

- NO_x
- VOC
- PM
- Hg
- Pb
- HCl

The permittee may calculate the emissions based on the fuel usage, the hours of operation, the emission factors from the latest stack test results, and/or the amount/type/content of materials processed.

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

For this Thermal Destructor and its associated control system, the permittee shall maintain a record of all inspections and maintenance performed. The record shall contain, at a minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any maintenance performed.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.**

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

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

For this Thermal Destructor and its associated control system,

(a) all afterburner exhaust flow shall be directed to its associated air pollution control system, except under the following conditions:

- (1) during the thermal destructor startup (warm-up) period and prior to materials being loaded to the thermal destructor;
- (2) during the thermal destructor cool down period, when the primary chamber temperature is below 500 °F.

(b) the permittee may operate the source only if its associated air pollution control equipment is operating properly.

(c) the permittee shall operate and maintain the source (including during start up and shutdown periods) in accordance with manufacturer's specifications and/or facility's work practice standards, and in a manner consistent with good air pollution control practices.

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

The permittee shall comply with the following work practice standards:

(a) A sufficient quantity of spare filters for the baghouse shall be kept on site.

(b) Before charging this unit, the temperature in afterburner chamber shall achieve at a minimum 1800 °F (or the minimum temperature that was obtained during the most recent performance test which demonstrates compliance and was approved by the Department) and be maintained throughout the operation (destruction period: when the primary chamber temperature is greater than 500 °F);

or

If this unit is charged when the destructor and the afterburner chamber are cold, the afterburner chamber temperature shall achieve at a minimum 1800 °F (or the minimum temperature that was obtained during the most recent performance test which demonstrates compliance and was approved by the Department) before firing the destructor. The afterburner temperature shall be maintained at this temperature throughout the operation.

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

This source, Lake City Destructor, consists of:

- (a) Primary chamber burner (rated at 2.4 MMBtu/hr total)
- (b) Afterburner (Source ID C03A, rated at 6.0 MMBtu/hr total).
- (c) Heat exchanger
- (d) Blower fan

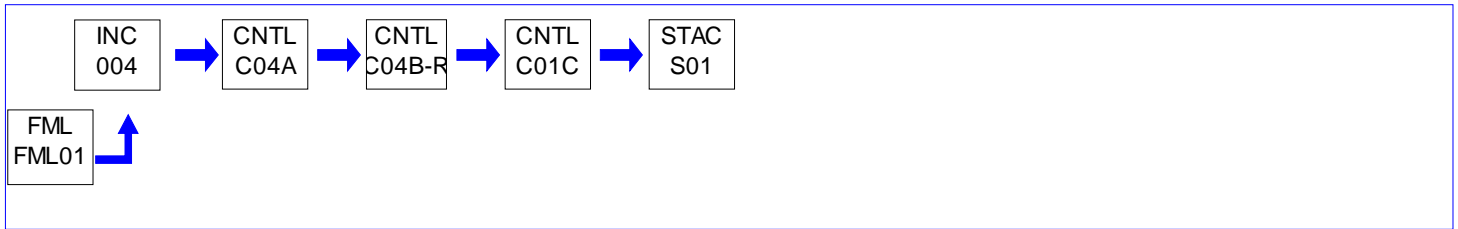
The exhaust from this source is treated in Baghouse 6 (C13B) and Scrubber 3 (C13C).

**SECTION D. Source Level Requirements**

Source ID: 004

Source Name: THERMAL DESTRUCTOR 4 (PENN RAM 450)

Source Capacity/Throughput:

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

Hourly emissions from this source to the atmosphere shall not exceed the following limits:

- (a) NO_x emissions: 0.85 lb/hr
- (b) Hg (Mercury) emissions: 0.0012 lb/hr (or 0.544 grams/hr)
- (c) Pb (Lead) emissions: 0.0015 lb/hr (or 0.68 grams/hr)
- (d) HCl emissions: 0.54 lb/hr

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

- (a) VOC emissions discharged to the atmosphere from this source shall not exceed 20 ppmvd, on a dry basis as methane (corrected at 7% oxygen), or with a minimum VOC removal efficiency of 95%.
- (b) PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source shall not exceed 0.02 gr/dscf, corrected at 7% oxygen, as measured by EPA Method 5.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13.]

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

- (a) Only natural gas shall be used as fuel for the destructor primary chamber(s).
- (b) Only natural gas shall be used as fuel for the afterburner.

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

(a) The emissions from this thermal destructor shall be directed through the following air pollution control system in the order listed below.

- (1) Afterburner
- (2) Baghouse
- (3) Scrubber

(b) The permittee shall operate the control devices within the following ranges:

- (1) Afterburner: a minimum exhaust gas temperature of 1800°F, or the minimum temperature that was obtained during the most recent performance test which demonstrates compliance and was approved by the Department.
- (2) Baghouse: pressure drop across the baghouse in the range of 0.01" - 6.0" w.c.
- (3) Scrubber: a maximum exhaust gas temperature of 150°F,

**SECTION D. Source Level Requirements**

a minimum scrubber solution flow rate of 110 gallons/min, and
a minimum solution pH of 7.3.

(c) The blower fan has a rated capacity of 1864 scfm.

II. TESTING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

(b) The stack test shall, at a minimum, test and/or monitor for the following:

- (1) NO_x, using EPA Method 7E
- (2) VOC, using EPA Method 25A
- (3) Lead (Pb) and mercury (Hg), using EPA Method 29
- (4) HCl, using EPA Method 320 or 26A
- (5) Temperature of primary chamber and afterburner exhaust gas
- (6) pH of the scrubber solution
- (7) Flow rate of the scrubber solution
- (8) Temperature of the scrubber exhaust gas
- (9) Pressure drop across the baghouse
- (10) Type and amount of material(s) processed
- (11) Incineration duration and average destruction rate (lb/hr)

The stack test shall be conducted in accordance with the provisions of EPA Methods or other Department approved methodology and 25 Pa. Code Chapter 139.

(c) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be emailed to the Regional Air Quality Manager and the PSIMS Administrator for approval (Condition #011 in Section C of this permit).

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For this Thermal Destructor and its associated control system, the permittee shall monitor the following operating parameters when it is in operation:

- (a) Temperature of the afterburner exhaust gas continuously (at a minimum, one data point per one minute).
- (b) Temperature of the scrubber exhaust gas continuously (at a minimum, one data point per one minute).

**SECTION D. Source Level Requirements**

- (c) Pressure drop across the baghouse, once per shift.
- (d) Flow rate of the scrubber solution, once per shift.
- (e) Scrubber solution pH, once per shift.

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

For this Thermal Destructor and its associated control system, the permittee shall monitor the following operating parameters when it is in operation:

- (a) The weight before and after each destruction cycle (per batch).
- (b) The time at the start and end of each destruction cycle,
- (c) The duration of each destruction cycle.
- (d) The incineration rate (charge weight divided by destruction cycle time, lb/hr)
- (e) The operating hours, daily and monthly.
- (f) The name and/or lot number, type and amount of material processed, per batch, daily, and monthly

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

For this Thermal Destructor and its associated control system, the permittee shall record the following, when it is in operation:

- (a) Temperature of the afterburner exhaust gas continuously, as a five-minute block average (an average of five data points for a period of five minutes).
- (b) Temperature of the scrubber exhaust gas continuously (at a minimum, one data point per five minute).
- (c) Pressure drop across the baghouse, once per shift.
- (d) Flow rate of the scrubber solution, once per shift.
- (e) Scrubber solution pH, once per shift.

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

For this Thermal Destructor and its associated control system, the permittee shall record the following, when it is in operation:

- (a) The weight before and after each destruction cycle (per batch).
- (b) The time at the start and end of each destruction cycle,
- (c) The duration of each destruction cycle.
- (d) The incineration rate (charge weight divided by destruction cycle time, lb/hr)
- (e) The operating hours, daily and monthly.
- (f) The name and/or lot number, type and amount of material processed, per batch, daily, and monthly

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

For this Thermal Destructor, the permittee shall maintain the following calculated emission records on monthly and a 12-month rolling sum basis:

- NOx
- VOC
- PM
- Hg
- Pb
- HCl

The permittee may calculate the emissions based on the fuel usage, the hours of operation, the emission factors from the latest stack test results, and/or the amount/type/content of materials processed.

**SECTION D. Source Level Requirements****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

For this Thermal Destructor and its associated control system, the permittee shall maintain a record of all inspections and maintenance performed. The record shall contain, at a minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any maintenance performed.

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

The permittee shall comply with the following work practice standards:

- (a) A sufficient quantity of spare filters for the baghouse shall be kept on site.
- (b) Before charging this unit, the temperature in afterburner chamber shall achieve at a minimum 1800 °F (or the minimum temperature that was obtained during the most recent performance test which demonstrates compliance and was approved by the Department) and be maintained throughout the operation (destruction period: when the primary chamber temperature is greater than 500 °F);
or
If this unit is charged when the destructor and the afterburner chamber are cold, the afterburner chamber temperature shall achieve at a minimum 1800 °F (or the minimum temperature that was obtained during the most recent performance test which demonstrates compliance and was approved by the Department) before firing the destructor. The afterburner temperature shall be maintained at this temperature throughout the operation.

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

For this Thermal Destructor and its associated control system,

- (a) all afterburner exhaust flow shall be directed to its associated air pollution control system, except under the following conditions:
 - (1) during the thermal destructor startup (warm-up) period and prior to materials being loaded to the thermal destructor;
 - (2) during the thermal destructor cool down period, when the primary chamber temperature is below 500 °F.
- (b) the permittee may operate the source only if its associated air pollution control equipment is operating properly.
- (c) the permittee shall operate and maintain the source (including during start up and shutdown periods) in accordance with manufacturer's specifications and/or facility's work practice standards, and in a manner consistent with good air pollution control practices.

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

Source ID 004 consists of the following:

- (1) Thermal Destructor 4 (Pennram destructor) has two primary chambers, rated 1.0 MMBtu/hr for each primary chamber



SECTION D. Source Level Requirements

- (2) Heat exchanger
- (3) A blower fan

**SECTION D. Source Level Requirements**

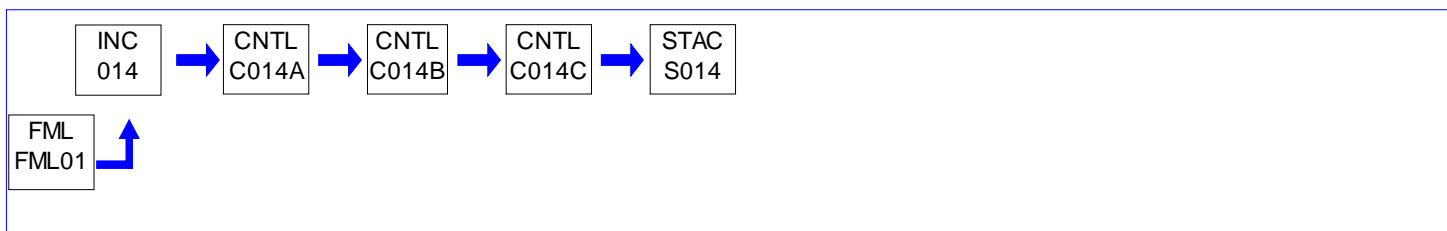
Source ID: 014

Source Name: THERMAL DESTRUCTOR 5 (PENNRAM550)

Source Capacity/Throughput:

N/A

RECOVERY MATERIAL

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

(a) VOC emissions from this source discharged to the atmosphere shall not exceed 20 ppmvd, on a dry basis as methane, corrected at 7% oxygen.

(b) Filterable PM emissions (PM10) discharged into the atmosphere shall not exceed 0.02 gr/dscf, corrected at 7% oxygen, as measured by EPA Method 5.

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

Yearly and hourly emissions from this source to the atmosphere shall not exceed the following limits:

NOx emissions: 0.94 lb/hr; emissions to be combined with emissions from other sources in SMOP 09-00196 with total remaining under 24.9 tpy on a rolling 12-month basis

DEP reserves the right to change limit based on the submission of an acceptable stack test.

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

Hourly emissions from this source to the atmosphere shall not exceed the following limits based on the average:

(a) Hg (Mercury) emissions: 0.0012 lb/hr (or 0.544 grams/hr)

(b) Pb (Lead) emissions: 0.0015 lb/hr

(c) HCl emissions: 0.54 lb/hr

Compliance with the condition limits above to be demonstrated by source stack testing as set forth in Condition #006.

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

(a) Only natural gas shall be used as fuel for the destructor primary chambers.

(b) Only natural gas shall be used as fuel for the afterburner.

**SECTION D. Source Level Requirements****Control Device Efficiency Restriction(s).****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The emissions from this thermal destructor shall be directed through the following air pollution control system in the order listed below:

- (1) Afterburner
- (2) Baghouse
- (3) Scrubber

(b) The permittee shall operate the control devices within the following ranges:

- (1) Afterburner: a minimum exhaust gas temperature of 1800°F or minimum temperature from most recent acceptable stack test demonstrating compliance with permit limits.
- (2) Baghouse: pressure drop across the baghouse in the range of 0.01 - 6.0 inches of water column.
- (3) Scrubber: a maximum exhaust gas temperature of 180°F, minimum scrubber solution flow rate of 60 gpm, minimum scrubber solution pH of 6.5. Sufficient scrubber flow rate to be verified during the shakedown period of this Plan Approval.

Note: The Department reserves the right to modify the operating parameters listed above, depending upon the submittal of acceptable stack test results. After the submittal of acceptable stack test results for this source, Abington Reldan Metals may request testing of this source at a lower temperature to determine permit limits. All changes to operating parameters above will be based on acceptable stack test results for this source.

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

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

b) The stack test shall, at a minimum, test for the pollutants list below with the required EPA test methods. Tests shall be conducted in accordance with the provisions of EPA Methods or other Department approved methodology and 25 Pa. Code Chapter 139.

The stack test shall, at a minimum, test and/or monitor for the following:

- (1) Filterable PM, using EPA Method 5
- (2) NO_x, using EPA Method 7E
- (3) VOC, using EPA Method 25A
- (4) Lead (Pb) and mercury (Hg), using EPA Method 29
- (5) HCl and Cl₂, using EPA Method 26A
- (6) Temperature of afterburner exhaust gas
- (7) pH of the scrubber solution
- (8) Flow rate of the scrubber solution
- (9) Temperature of the scrubber exhaust gas
- (10) Pressure drop across the baghouse
- (11) The permittee shall record type and amount of material(s) processed and average incineration rate (lb/hr) during the test.

Note: the permittee may take VOC and PM testing samples at downstream of the scrubber (near the stack outlet before discharging into the atmosphere).

(c) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the

**SECTION D. Source Level Requirements**

test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

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

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

The permittee shall monitor the following operating parameters, when the thermal destructor is in operation, for each batch unless otherwise noted:

- (a) Weight before and after destruction cycle for each batch.
- (b) Time of afterburner startup (warm-up).
- (c) Destruction cycle end time at which thermal destructor's burners have shut down.
- (d) Each destruction cycle duration and hours of operation daily.
- (e) The incineration rate (charging weight divided by destruction time).
- (f) Temperature of the afterburner exhaust, continuously.
- (g) Temperature of the scrubber exhaust gas, continuously.
- (h) Pressure drop across the baghouse, once per shift.
- (i) Flow rate of the scrubber solution, once per shift.
- (j) The scrubber solution pH, once per shift.
- (k) Pressure drop across scrubber unit, once per shift.

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

The permittee shall record the following when the thermal destructor is operating:

- (a) Weight before and after destruction cycle for each batch.
- (b) Time of afterburner startup (warm-up).
- (c) Destruction cycle end time at which thermal destructor's burners have shut down.
- (d) Each destruction cycle duration and hours of operation daily.
- (e) The incineration rate (charging weight divided by destruction time).
- (f) Temperature of the afterburner exhaust, continuously.
- (g) Temperature of the scrubber exhaust gas, continuously.
- (h) Pressure drop across the baghouse, once per shift.
- (i) Flow rate of the scrubber solution, once per shift.
- (j) The scrubber solution pH, once per shift.
- (k) Pressure drop across scrubber unit, once per shift.

Note: Recording of parameters every 5 minutes will meet the continuous recordkeeping requirement.

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

For this Thermal Destructor, the permittee shall maintain the following calculated emission records on monthly and a 12-month rolling sum basis:

**SECTION D. Source Level Requirements**

- NOx
- VOC
- PM
- Hg
- Pb
- HCl

The permittee may calculate the emissions based on the fuel usage, the hours of operation, the emission factors from the latest stack test results, and/or the amount/type/content of materials processed.

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

The permittee shall comply with the following work practice standards:

- (a) Gas residence time in the afterburner shall be at least 1.2 second when the thermal destructor is operating.
- (b) Thermal destructor will include an interlock that prevents firing of destructor burners while afterburner exhaust gas temperature is below 1800°F or while doors are open. This interlock will also shutdown destructor if the afterburner exhaust temperature drops below 1800°F and will not permit re-ignition until temperature readings stabilize at 1800°F or higher. An afterburner exhaust gas temperature of 1800°F shall be maintained throughout the destruction cycle.
- (c) Both primary chambers may operate at the same time. DEP reserve the right to change operation the primary chambers based on acceptable stack test results.

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

- (a) Source IDs 014, C014A, C014B, and C014C shall be installed in accordance with the manufacturer's specifications, the plans submitted with the application, and as approved herein.
- (b) The permittee shall maintain this source group and associated control equipment according to manufacturer's specifications.
- (c) The permittee shall operate this source group and the associated control equipment in a manner consistent with good air pollution control practices, and/or facility's work practice standards.
- (d) A sufficient quantity of spare filters for the baghouse shall be kept on site.

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

- a) All emissions from this thermal destructor shall be directed to the operating air pollution control system, except under the following conditions:
 - (1) During afterburner startup (warm-up) period prior to firing of thermal destructor burners
 - (2) During cool down period of the thermal destructor, the permittee shall follow a Department approved standard operating procedure outlined in ARM-550-EWI-001 or other Department approved method for the shutdown of the emissions control devices. This cool down period will commence with the shut down of the destructor's burners at the end of destruction cycle. The end of cycle time will be monitored and recorded for each batch as required in Conditions #007 and #008.
- (A) The permittee may request to use an alternative to a standard operating procedure for the shutdown of the emissions control devices. Such request must be made via Plan Approval Modification or Minor Permit Modification application and be

**SECTION D. Source Level Requirements**

Department approved before permittee uses the alternative procedure. In the request, the permittee must outline the alternative procedure and provide supporting proof the procedure will not result in fugitive or other emissions in excess of the limits in Conditions #001, 002 and 003.

(b) The permittee may operate this thermal destructor only if the associated air pollution control equipment is operating properly.

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

The permittee shall install and maintain operational devices to measure and monitor the following conditions:

- (a) Outlet temperature of the afterburner.
- (b) Inlet temperature of the baghouse.
- (c) Pressure drop across the baghouse.
- (d) Scrubber solution pH.
- (e) Scrubber solution flow rate.
- (f) Pressure drop across the scrubber.
- (g) Temperature of scrubber exhaust.

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

This source group consists of:

- (a) Thermal Destructor 5 (PennRam 2; Source ID 014) with two (2) main chambers, each chamber containing two (2) 0.5 MMBtu/hr burners (1.0 MMBtu/hr per chamber) for a total of 2.0 MMBtu/hr input to main chambers of destructor
- (b) Afterburner Destructor 5 (PennRam 2; Source ID C014A) with heat exchanger (waste heat recovery boiler), one burner rated at 4.2 MMBtu/hr
- (c) Baghouse Destructor 5 (PennRam 2; Source ID C014B) LDX Solutions 6238-12-10
- (d) Scrubber Destructor 5 (PennRam 2; Source ID C014C) Packed Tower
- (e) Fan, negative pressure



SECTION D. Source Level Requirements

Source ID: 005 Source Name: SMALL BALL MILLS & SIFTERS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: BALL MILLS



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.

[25 Pa. Code §127.441]
Operating permit terms and conditions.
 This source group consists of the following mills and sifters, with a baghouse #9 (Source ID C05) for PM control:

Processing Equipment	Manufacturer/Model No.
1 unit - Large Paul Abbie Mill	Paul Abbie, BM-6
1 unit - 48" Sifter	Sweco, MX48
1 unit - #9 Octagonal Mill	Custom
1 unit - Large Paul Abbie Mill	Paul Abbie, BM-6

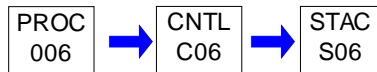
**SECTION D. Source Level Requirements**

Source ID: 006

Source Name: LARGE BALL MILLS & SIFTERS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: BALL MILLS

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

(a) This source group consists of the following mills and sifters with a baghouse #8 (Source ID C06) for PM control:

Processing Equipment	Manufacturer/Model No.
1 unit - Large Paul Abbie Mill (drum demension 32" x 48") (RFD # 7059)	
2 units - Small Paul Abbie Batch Mill	Paul Abbie
2 units - Small Batch Mills	Custom
3 units - 24" Sifters	Sweco, ZS24
1 unit - 32' Sifter	Sweco, MX30
1 unit - Ball Mill #1(German Mill #2A)	Steinlein, 28968-GP-106
1 unit - Ball Mill #2(German Mill #2B)	Steinlein, 28968-GP-107
1 unit - Ball Mill #3 (German Mill #4)	Steinlein, 28968-GP-108
1 unit - A&A Mill #1	--

**SECTION D. Source Level Requirements**

1 unit - A&A Mill #2	--
1 unit - Shatter Box	Custom
1 unit - Dust Box	Gemco

(b) The following, without flow and PM emissions to Baghouse C06, are also listed under this source:

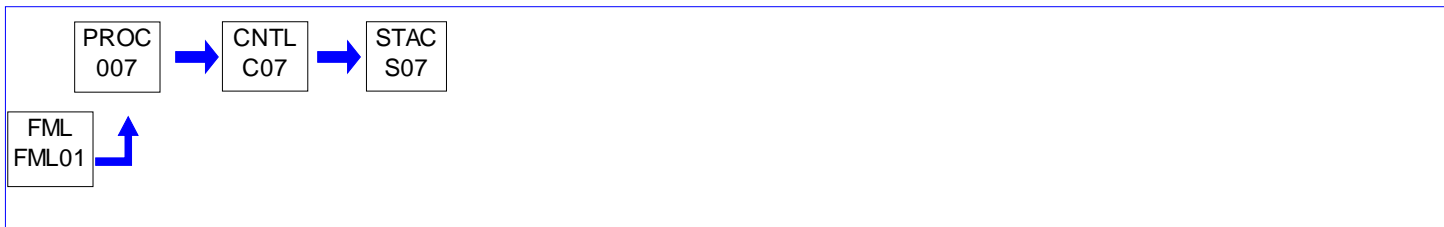
- 1 unit - PK V Mini Blender
- 1 unit - Large Cone Blender (Gemco)
- 1 unit - Small Cone Blender (Gemco)

**SECTION D. Source Level Requirements**

Source ID: 007

Source Name: SMALL MELT FURNACES

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source group shall not exceed 0.02 gr/dscf, as measured by EPA Method 5.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13(c)(1)(i).]

Fuel Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use natural gas and/or electricity to operate the melt furnaces of this source group.

Control Device Efficiency Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The pressure drop across the associated baghouse shall be maintained between 1.0 and 6.0 inches of water column, while the source is operating.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following:

(a) For natural gas fired melt furnaces, the fuel usage monthly and/or the hours of operation daily.

(b) For the electric melt furnaces, the hours of operation daily.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following operating parameters, when the source is in operation:

(a) The hours of operation of the baghouse, daily.

(b) The pressure drop across the baghouse, daily.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall record the following:

- (1) For natural gas fired melt furnaces, the fuel usage monthly and/or the hours of operation daily.
- (2) For electric melt furnaces, the hours of operation daily and monthly.

(b) The permittee shall calculate and keep the following records monthly, as a 12-month rolling sum, based on the fuel usage and/or the hours of operation, the emission factors obtained from the latest stack testing:

- (1) NO_x
- (2) PM

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

The permittee shall maintain a record of all inspections and maintenance for the baghouse. The record shall contain, at a minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any maintenance performed.

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

The permittee shall record the following operating parameters, when the source is in operation:

- (a) The hours of operation of the baghouse, daily.
- (b) The pressure drop across the baghouse, daily.

V. REPORTING REQUIREMENTS.

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

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

- (a) The permittee shall perform a visual check of the processing equipment of this source group and the associated baghouse, daily when the source is in operation.
- (b) The permittee shall ensure that the baghouse is operating properly before putting any individual piece of the processing equipment of this source group into service. All exhaust from this source shall be vented to its associated baghouse.
- (c) The permittee shall ensure that a sufficient quantity of spare baghouse filters are kept on hand for replacement.
- (d) The permittee shall operate and maintain a pressure differential gauge for the associated baghouse.

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

- (a) Source ID 007 consists of the following processing equipment:

**SECTION D. Source Level Requirements**

1 unit - 15 KVA Electric Melt Furnace (5#) Custom (inkind replacement under RFD # 7074)
1 unit - 35 KVA Electric Melt Furnace (Double Push) Inductotherm
1 unit - 35 KVA Electric Melt Furnace (Small Tilt) Inductotherm
1 unit - 75 KVA Electric Melt Furnace (300# Tilt) Inductotherm
1 unit - 75 KVA Electric Melt Furnace (150# TBD) Inductotherm
1 unit - 125 KVA Electric Melt Furnace (16# Push) Inductotherm
1 unit - 125 KVA Electric Melt Furnace (Swing Lift) Inductotherm
1 unit - Dish Melt Custom
2 units - 0.5MMBtu/hr Small Gas Melt Furnace (12 crucible size) Custom
1 unit - 0.5MMBtu/hr Small Gas Melt Furnace (16 crucible size) Custom
1 unit - 0.5MMBtu/hr Small Gas Melt Furnace (50 crucible size) Custom

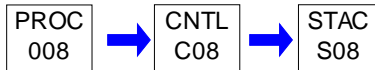
(b) The exhaust from this source group vents to Small Melt Furnace Baghouse, Source ID C07 (Wheelabrator baghouse, Model No. JPF170, air flow: 14,000 cfm).

**SECTION D. Source Level Requirements**

Source ID: 008

Source Name: MELT FURNACE AREA #2

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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 SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

Fuel Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use electricity to operate this source.

Throughput Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not add any sulfur containing additives to any melt furnaces listed under Source ID 008, including, but not limited to, the following:
 - pyrites (FeS₂)

Control Device Efficiency Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a). When operating the 300# Melt Furnace, the majority process emissions shall be collected by the 8 inch horseshoe duct; and the fugitive emissions shall be collected by the movable hood.

(b). The process emissions originated from Source ID 008 shall be collected and directed to the main duct of Source ID 008, and then vented to the baghouse, Source ID C08, for particulate matter (PM) emissions control.

(c). The pressure drop across the baghouse, Source ID C08, shall be maintained between 0.1 and 6.0 inches of water column, while the source is operating.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source group shall not exceed 0.02 gr/dscf, as measured by EPA Method 5.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13(c)(1)(i).]

II. TESTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following daily, when the 300# Melt Furnace is in operation,

- (1) the type of materials processes, and
- (2) the amount of materials processed.

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

The permittee shall monitor the following operating parameters, when the source is in operation:

- (a) The hours of operation of the baghouse, daily.
- (b) The pressure drop across the baghouse, daily.

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

The permittee shall keep the PM emission records monthly, as a 12-month rolling sum, based on the hours of operation and the emission factor obtained from the latest stack testing.

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

(a). The permittee shall keep the following records daily, when the 300# Melt Furnace is in operation,

- (1) the type of materials processes, and
- (2) the amount of materials processed.

(b). The permittee shall compile the amount and the type of materials processed in the 300# Melt Furnace monthly.

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

The permittee shall maintain a record of all inspections and maintenance for the baghouse. The record shall contain, at a minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any maintenance performed.

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

The permittee shall record the following operating parameters, when the source is in operation:

- (a) The hours of operation of the baghouse, daily.
- (b) The pressure drop across the baghouse, daily.

V. REPORTING REQUIREMENTS.

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

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

- (a) The permittee shall perform a visual check of the processing equipment of this source group and the associated baghouse, daily when the source is in operation.
- (b) The permittee shall ensure that the baghouse is operating properly before putting any individual piece of the processing equipment of this source group into service. All exhaust from this source shall be vented to its associated baghouse.
- (c) The permittee shall ensure that a sufficient quantity of spare baghouse filters are kept on hand for replacement.
- (d) The permittee shall operate and maintain a pressure differential gauge for the associated baghouse.

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

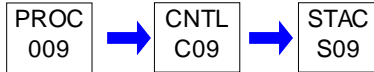
- (a). This source group consists of the following:
 - 1 unit - Bar Cleaner, Pangburn Rotoblast
 - 1 unit - 300# Melt Furnace
 - 1 unit - #1 Fugitive Hood (for 16# push & swing lift furnaces, under Source ID 007)
 - 1 unit - #2 Fugitive Hood (for Melt Furnace Area)
- (b). The exhaust from 300# Melt Furnace is collected by the following
 - movable hood, connected to the main duct
 - 8 inch horseshoe hood
- (c). The control device associated with Source ID 008 is 1 unit - Baghouse, Source ID C08.

**SECTION D. Source Level Requirements**

Source ID: 009

Source Name: TILT MELT FURNACES

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source group shall not exceed 0.02 gr/dscf, as measured by EPA Method 5.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13(c)(1)(i).]

Fuel Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall only use electricity to operate the tilt melt furnaces of this source group.

Control Device Efficiency Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The pressure drop across the baghouse shall be maintained between 0.1 and 6.0 inches of water column, while the source is operating.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following operating parameters, when the source is in operation:

- (a) The hours of operation of the baghouse, daily.
- (b) The pressure drop across the baghouse, daily.

IV. RECORDKEEPING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep the PM emission records monthly, as a 12-month rolling sum, based on the hours of operation and the emission factor obtained from the latest stack testing.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a record of all inspections and maintenance for the baghouse. The record shall contain, at a

**SECTION D. Source Level Requirements**

minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any maintenance performed.

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

The permittee shall record the following operating parameters, when the source is in operation:

- (a) The hours of operation of the baghouse, daily.
- (b) The pressure drop across the baghouse, daily.

V. REPORTING REQUIREMENTS.

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

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

- (a) The permittee shall perform a visual check of the processing equipment of this source group and the associated baghouse, daily when the source is in operation.
- (b) The permittee shall ensure that the baghouse is operating properly before putting any individual piece of the processing equipment of this source group into service. All exhaust from this source shall be vented to its associated baghouse.
- (c) The permittee shall ensure that a sufficient quantity of spare baghouse filters are kept on hand for replacement.
- (d) The permittee shall operate and maintain a pressure differential gauge for the associated baghouse.

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

- (a) Source ID 009 consists of the following:

1 unit - 350 KVA Tilt Melt Furnace (3000# Tilt) Inductotherm
 1 unit - 350 KVA Tilt Melt Furnace (1000# Tilt) Inductotherm
 1 unit - 350 KVA Melt Furnace (500# Tilt) Inductotherm
 1 unit - 200 KVA Melt Furnace (1000# Tilt) Pillar
 1 unit - 200 KVA Melt Furnace (300# Tilt) Pillar
 1 unit - 200 KVA Melt Furnace (150# Tilt) Custom
 1 unit - 125 KVA Electric Melt Furnace (Lift 50#) Inductotherm
 1 unit - 125 KVA Electric Melt Furnace (Double Push 16#) Inductotherm

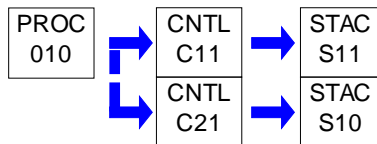
- (b) The exhaust from this source group vents to Tilt Melt Furnace Baghouse, Source ID C09 (an American Air Filter baghouse).

**SECTION D. Source Level Requirements**

Source ID: 010

Source Name: ACID ROOM PROCESS

Source Capacity/Throughput:

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

The emissions from this source shall not exceed the following limits:

(a) Exhaust from Acid Room NO_x Scrubber (C21) :

- (1) HCl emissions: 0.015 lb/hr
- (2) Cl₂ emissions : 0.015 lb/hr
- (3) NO_x emissions: 4.73 lb/hr and 15 tpy

(b) Exhaust from Acid Room General Scrubber (C11):

- (1) HCl emissions: 0.3 lb/hr
- (2) Cl₂ emissions : 0.3 lb/hr

[25 Pa. Code §123.31]**Limitations**

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

Control Device Efficiency Restriction(s).**[25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Exhaust of the acid room reacting processes shall be directed through the Source ID C10 - Scrubber (Acid Room NO_x Scrubber) before venting into the atmosphere. In order to achieve proper air pollution removal efficiencies, the permittee shall operate the C21 scrubber to maintain:

- (1) Inlet gas flow rate of 3,000 to 5,000 acfm
- (2) Scrubber solution flowrate: 450 to 550 gallons/min.
- (3) Scrubber solution pH reading: 9 to 13.
- (4) Static pressure across C21 scrubber: 0.25" to 7.0" w. c.
- (5) Oxidation/reduction probe (ORP) readings: equal to or less than -200 millivolts (mv).

(b) Exhaust of the general room air shall be directed through the Source ID C11 - Scrubber (Acid Room General Scrubber) before venting into the atmosphere. In order to achieve proper air pollution removal efficiencies, the permittee shall operate the C11 scrubber to maintain:

- (1) A minimum scrubber solution flowrate: 190 gallons/min.
- (2) Scrubber solution pH reading: equal to or greater than 9.
- (3) Static pressure across C11 scrubber: 1.0" to 4.0" w. c.

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

(a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of this manual has been revised since approval, a new protocol must be submitted for approval.

(b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) The permittee shall conduct the stack test for the Acid Room Scrubbers (Source IDs C21 and C11), at a minimum, for the following:

- (1) Cl₂, using EPA Method 26A
- (2) HCl, using EPA Method 320 or 26A
- (3) NO_x, using EPA Method 7 or 7E
- (4) pH of the scrubber solution
- (5) Flowrate of the scrubber solution
- (6) Temperature of the scrubber solution
- (7) Pressure drop across the scrubbers
- (8) Oxidation/Reduction Probe (ORP) reading of the NO_x scrubber solution (for Source ID C21 only)

Tests shall be conducted in accordance with the provisions of EPA Methods or other Department approved methodology and 25 Pa. Code Chapter 139.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

The permittee shall monitor the following process chemical usage on a monthly basis:

- (a) nitric acid solution (gallons)
- (b) hydrochloric acid solution (gallons)
- (c) chlorine gas (cubic feet or pounds)
- (d) sulfur dioxide gas (cubic feet or pounds)
- (e) any other chemical(s) which results in air emission(s) (in cubic feet or pounds)
- (f) the hours of operation on month and 12-month rolling basis

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

The permittee shall monitor the following for both scrubbers (C11 and C21) and processes for each shift when the Acid Room is operating:

**SECTION D. Source Level Requirements**

- (a) pH of the scrubbing solution
- (b) Scrubbing solution flow rate.
- (c) Pressure drop across the scrubber.
- (d) Oxidation/Reduction potential (ORP) for NOx Scrubber only(C21).
- (e) Amount of material being processed.
- (f) Amount of metals recovered.

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

The permittee shall keep records of the following process chemical usage on a monthly basis:

- (a) nitric acid solution (gallons)
- (b) hydrochloric acid solution (gallons)
- (c) chlorine gas (cubic feet or pounds)
- (d) sulfur dioxide gas (cubic feet or pounds)
- (e) any other chemical(s) which results in air emission(s) (in cubic feet or pounds)
- (f) the hours of operation on month and 12-month rolling basis

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

The permittee shall keep records of the following for both scrubbers (C11 and C21) and processes for each shift when the Acid Room is operating:

- (a) pH of the scrubbing solution
- (b) Scrubbing solution flow rate.
- (c) Pressure drop across the scrubber.
- (d) Oxidation/Reduction potential (ORP) for NOx Scrubber only(C21).
- (e) Amount of material being processed.
- (f) Amount of metals recovered.

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

The permittee shall keep records of the following emissions, calculated on a monthly and 12-month rolling sum basis, using emission factors obtained from the latest stack testing and/or a Department-approved method(s).

- (a) For Acid Room NOx Scrubber (C21)
 - (1) NOx
 - (2) Cl₂
 - (3) HCl
- (b) For Acid Room General Scrubber (C11)
 - (1) Cl₂
 - (2) HCl

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

The permittee shall operate this source in accordance to manufacturer specifications and good air pollution control

**SECTION D. Source Level Requirements**

practices.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall ensure the following practices are implemented:

- (a) Valves for switch emissions from NOx scrubber to general acid room scrubber shall have legible labels.
- (b) While material is being processed in a bath, the lid on the vat shall be closed except for when there is a need to add additional chemicals or material and monitoring purposes.
- (c) Written standard operating procedures, including those in electronic format, for the chemical processes shall be accessible to employees operating the Acid Room at all times.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee may proceed with the acid room processes only if both of the acid room scrubbers are operating properly.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

All emissions from NOx producing processes shall be directed to the NOx scrubber.

VII. ADDITIONAL REQUIREMENTS.

[25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Acid Room includes the following process equipment:

- 4 units - kettles
- 2 units - fiberglass kettles (Abmi)
- 3 units - table top hoods
- 2 units - filter hoods
- 3 units - drum hoods
- 5 units - tanks for storage or water treatment
- 1 unit - tumbler
- 2 units - polypropylene process tanks
- 2 units - stainless steel holding tanks

(b) The Acid Room pollution control system consists of :

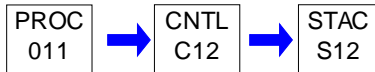
- (1) Source ID C21 - Acid Room NOx Scrubber, KCH Engineered Systems packed tower scrubber model Phaser-VX-10,000, rated for up to 10,000 cfm with variable speed fan.
- (2) Source ID C11 - Acid Room General Scrubber with a blower fan with rated capacity of 20,000 scfm.

**SECTION D. Source Level Requirements**

Source ID: 011

Source Name: STRIP ROOM / CYANIDE ROOM

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****[25 Pa. Code §123.31]****Limitations**

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

Control Device Efficiency Restriction(s).**[25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The emissions from the strip room operation shall be directed through Source ID C12 - Scrubber (Strip Room General Scrubber) before venting into the atmosphere.

(b) In order to achieve proper air pollution removal efficiencies, the permittee shall operate the Strip Room scrubber (C12) to maintain:

- (1) a minimum scrubber solution flowrate: 80 gal/min.
- (2) scrubber solution pH reading: equal to or greater than 8.
- (3) a static pressure across the scrubber: 2" to 6" w.c.

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

The permittee shall monitor the following, when the strip room is operating,

- (a) The hours of operation, weekly.
- (b) The amount of precious metal solution produced (in gallons), monthly.

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

The permittee shall monitor the following operating parameters of the strip room general scrubber, once per shift, when the strip room is operating:

- (a) The scrubber solution pH reading.
- (b) The scrubber solution flowrate.
- (c) The static pressure reading across the scrubber.

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****[25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall record the following, when the strip room is operating,

- (1) The hours of operation, weekly.
- (2) The amount of precious metal solution produced (in gallons), monthly.

(b) The permittee shall keep records of gold and cyanide emissions, calculated on a monthly and 12-month rolling sum basis, using a Department-approved method(s) based on the hours of operation and the production rate.

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

The permittee shall record the following operating parameters of the strip room general scrubber, once per shift, when the strip room is operating:

- (a) The scrubber solution pH.
- (b) The scrubber solution flow rate.
- (c) The static pressure reading across the scrubber.

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

(a) All exhausts from the strip room operation shall be directed to Source ID C12 - Strip Room General Scrubber, before venting into the atmosphere.

(b) The permittee may proceed with the strip room process only if the associated air pollution control equipment is operating properly.

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

(a) The Strip Room includes the following process equipment:

- Total electrolytic area: 5.57 m² (plating operation)
- 7 units - strip tanks
- 1 unit - sample mixing tank
- 2 units - holding/reaction tanks
- 1 unit - scrubber tank
- 1 unit - fume hood

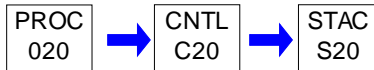
(b) The Strip Room pollution control system consists of a Strip Room General Scrubber and a blower fan (rated at 10,000 scfm).

**SECTION D. Source Level Requirements**

Source ID: 020

Source Name: SHREDDER (GRANULATOR)

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source shall not exceed 0.02 gr/dscf, as measured by EPA Method 5.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13.]

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The access door to the shredder system enclosure shall be closed when the source is in operation.

(b) The pressure drop across this baghouse shall be maintained between 0.5" and 6.0" water column, while the process is operating.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following daily, when the source is in operation:

- (a) The hours of operation.
- (b) The lot number and/or name, type, and amount of materials processed.
- (c) The pressure drop across the baghouse.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the following, when the source is in operation:

- (a) The lot number and/or name, and type of materials processed, daily.
- (b) The amount of materials processed, daily and monthly.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the following operating parameters for the baghouse, when the source is in operation:

- (a) The hours of operation, daily and monthly.
- (b) The pressure drop across the baghouse, daily.

**SECTION D. Source Level Requirements****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain a record of all preventative maintenance inspections for this source. The record shall contain, at a minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any routine maintenance performed.

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

The permittee shall

- (a) perform a visual check of the shredder baghouse (C20), once per operating day.
- (b) ensure that the baghouse is operating properly before putting the shredder into service, and a sufficient quantity of spare baghouse filters are kept on hand for replacement.
- (c) operate and maintain this source, including the associated baghouse and pressure gauge, in accordance with the manufacturer's specifications and/or the facility's work practice standards, and in a manner consistent with good air pollution control and safety practices.

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

This source consists of:

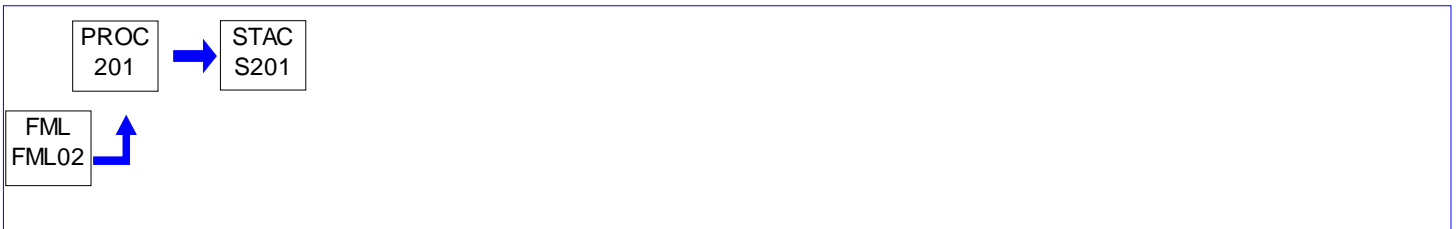
- Shredder
- Conveyors
- Pre-shredder (installed under RFD No. 4228)
- Hammer Mill (installed under RFD No. 4228)
- Dust Collector #2 (vent indoors, 7,000 cfm)

**SECTION D. Source Level Requirements**

Source ID: 201

Source Name: EMERGENCY GENERATOR

Source Capacity/Throughput: 7.800 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 (filterable PM) from this source, at any time, in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The NOx emissions from this source shall not exceed 3.08 tons per year, on a 12-month rolling sum basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Visible emissions from this emergency generator stack shall not exceed the following limitations:

- (a) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
- (b) Equal to or greater than 30% at any time.

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**

The permittee shall use only diesel fuel for this source, which meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, as listed below:

- (a) Maximum sulfur content: 15 parts per million (ppm, by weight)
- (b) Minimum cetane index: 40, or maximum aromatic content: 35% by volume

[Compliance with this condition assures compliance with 25 Pa. Code §123.21.]

Operation Hours Restriction(s).

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For this source, total operating hours, including maintenance checks and readiness testing, shall not exceed 500 hours per year, calculated as a 12-month rolling sum.

[Note: The 500 hours per 12-month rolling period includes the hours of operation as per the compliance requirements for emergency engines in according with 40 CFR §60.4211(f).]

**SECTION D. Source Level Requirements**

**# 006 [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?**

Pursuant to 40 CFR §60.4211(f), if the permittee does not operate this source according to the requirements in paragraphs (a) and (b) of this condition, this source will not be considered an emergency engine under Subpart III and shall meet all applicable requirements for non-emergency engines.

(a) Pursuant to 40 CFR §60.4211(f)(2)(i) through (iii), the permittee may operate the emergency stationary ICE for any combination of the purposes of maintenance checks and readiness testing for a maximum of 100 hours per calendar year.

(b) Pursuant to 40 CFR §60.4211(f)(3), emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of non-emergency operation are counted as part of the 100 hours per calendar year defined in paragraph (a), above.

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.

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

For this source, the permittee shall monitor the following:

- (a) startup and shutdown time, operating status (such as maintenance and emergency), when it is in operation.
- (b) emergency operating hours and non-emergency operating hours for each operation.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

Operating time for this source shall be monitored using a non-resettable hour meter.

IV. RECORDKEEPING REQUIREMENTS.

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

For this source, the permittee will maintain the following records:

- (a) startup and shutdown time, duration of operation, operating status (such as maintenance and emergency), when it is in operation.
- (b) total operating hours and total non-emergency operating hours, daily, monthly, annually, and as a 12-month rolling sum.
- (c) NOx emissions monthly.
- (d) a copy of manufacturer's operating and maintenance specifications.
- (e) maintenance records, i.e., routine/preventative maintenance, repairs, parts replacement, tune-ups, etc.

[Compliance with this condition assures compliance with 40 CFR §60.4214(b).]

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

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

- (a) Sulfur content.

**SECTION D. Source Level Requirements**

(b) Cetane index or aromatic content.

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

(a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).

(b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.

012 [25 Pa. Code §129.203]**Stationary internal combustion engines.**

By October 31 of each year, the permittee shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.

The permittee shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate set forth below:

(1) For a compression ignition stationary internal combustion engine firing diesel fuel, 2.3 grams of NO_x per brake horsepower-hour.

013 [25 Pa. Code §129.204]**Emission accountability.**

(a) If the combined allowable NO_x emissions for the engines of the reciprocating compressors during the ozone season exceed the combined actual NO_x emissions from the engines during the ozone season, the permittee may deduct the difference or any portion of the difference from the amount of actual NO_x emissions from an engine(s) subject to 25 Pa. Code § 129.204 at any of the permittee's other facilities (during the ozone season).

(b) If the combined allowable NO_x emissions for an engine(s) subject to 25 Pa. Code § 129.204 at any of the permittee's other facilities during the ozone season exceed the combined actual NO_x emissions from the respective engine(s) during the ozone season, the permittee may deduct the difference or any portion of the difference from the amount of actual NO_x emissions from the engines of the reciprocating compressors (during the ozone season).

014 [25 Pa. Code §129.204]**Emission accountability.**

(a) One of the following shall be used to determine actual emissions of NO_x:

(1) The one-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NO_x, or

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

(i) The highest rate determined by use of the emission factor for the source class contained in the most up-to-date version

**SECTION D. Source Level Requirements**

of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors", or

(ii) The highest rate determined by use of the emission factor for the source class contained in the most up-to-date version of EPA's "Factor Information Retrieval" (FIRE) data system.

(3) An alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

(b) The permittee shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(c) By November 1 of each year, the permittee shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account and provide to the Department, in writing, the following:

- (1) The serial number of each NO_x allowance surrendered.
- (2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.

(d) If the permittee does not comply with (c)(1) - (2), above, in a given year, then the permittee shall surrender, on or before December 31 of that year, three NO_x allowances for each NO_x allowance that was required to be surrendered in (c)(1) - (2), above. The surrendered NO_x allowances may be of current or later year vintage.

(For each ozone season beginning after January 1, 2015, the Department intends to accept the surrender of annual and ozone season TR NO_x allowances as a compliance alternative to the surrender of annual and ozone season CAIR NO_x allowances if the TR allowances are surrendered for compliance purposes in a manner consistent with the surrender provisions for CAIR allowances set forth in the applicable sections specified in this notice. The Department consulted with staff in the United States Environmental Protection Agency (EPA) Region III Office in developing an alternative allowance surrender approach for compliance with the applicable SIP-approved requirements. To this end, the EPA has confirmed, in writing, that TR NO_x allowances may be surrendered as set forth in the applicable regulations in 25 Pa. Code Chapters 129 and 145. A detailed notice was published in the PA bulletin on April 4, 2015 [45 Pa.B. 1687]).

015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]

Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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

The permittee shall operate and maintain this source in a manner consistent with safety and good air pollution control practices for minimizing emissions, and in accordance with manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.

016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) This source is a 800 kW Cummins diesel emergency generator, Model No.: DQFAB-800053 A, Serial No. 1090028285, EPA Tier II certified, constructed in 2009, rated at 800 KW (1175 bHP).

(b) This source has the following manufacturer emission data:

- (1) NO_x: 4.77 g/hp-hr;
- (2) CO : 2.61 g/hp-hr;
- (3) HC : 0.08 g/hp-hr; and
- (4) PM (particulate matter): 0.15 g/hp-hr.

**SECTION D. Source Level Requirements**

(c) The permittee shall use the manufacturer emission data in subpart (b) above, to calculate air pollutant emissions. EPA Tier II certification for this source meets the 40 CFR Part 60 Subpart IIII requirements.

(d) This generator is also subject to 40 CFR Part 63 Subpart ZZZZ. The permittee may fulfill the Subpart ZZZZ requirements by being in compliance with the applicable Subpart IIII requirements.

**SECTION E. Source Group Restrictions.**

Group Name: BALL MILLS

Group Description: Small and Large Ball mills

Sources included in this group

ID	Name
005	SMALL BALL MILLS & SIFTERS
006	LARGE BALL MILLS & SIFTERS

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

PM emissions (Filterable PM₁₀) discharged into the atmosphere from this source shall not exceed 0.02 gr/dscf, as measured by EPA Method 5.

or,

The control device (Baghouse) shall achieve, at a minimum, 99% of PM removal efficiency and 100% of process exhaust capture efficiency.

[Compliance with this PM emission limitation assures compliance with 25 Pa. Code §123.13.]

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

The pressure drop across this baghouse shall be maintained between 0.5 and 6.0 inches of water column, while the process is operating.

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

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

(b) The source test shall, at a minimum, test for filterable PM₁₀ and flowrate. Tests shall be conducted in accordance with the provisions of EPA Methods 2 and 5 or other Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

(c) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

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

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**SECTION E. Source Group Restrictions.****III. MONITORING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall monitor the following daily, when this source is in service:

- (1) Operating hours.
- (2) The pressure drop across the baghouse.

(b) The permittee shall monitor the following, on per lot basis:

- (1) The date of each lot of the material processed.
- (2) The lot number, name, and/or description.
- (3) The amount and type of the material processed.

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

(a) The permittee shall keep the following records daily, when this source is in service:

- (1) Operating hours.
- (2) The pressure drop across the baghouse.

(b) The permittee shall keep the following records, on per lot basis:

- (1) The date and duration of each lot of the material processed.
- (2) The name and/or lot number.
- (3) The amount and type of the material processed.

(c) The permittee shall compile and record the materials processed each month.

(d) Based on the PM emission factor from the latest stack test results, the amount and type of materials processed, and the operating hours, the permittee shall keep the following records monthly, as a 12-month rolling sum:

- (1) Filterable PM emissions.

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

The permittee shall maintain a record of all inspections and maintenance for the baghouse. The record shall contain, at a minimum, the following:

- (a) The date of the inspection.
- (b) Any problems or defects.
- (c) The corrective action taken.
- (d) Any maintenance performed.

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

The permittee shall ensure that:

- (1) the control device is operating properly before putting any individual piece of the processing equipment into service.
- (2) a sufficient quantity of spare baghouse filters are kept on hand for replacement.

**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).



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
003	THERMAL DESTRUCTOR 3 (LAKE CITY)		
Emission Limit		Pollutant	
1.100	Lbs/Hr		Hydrogen Chloride (Anhydrous)
0.001	Lbs/Hr		Lead
0.002	Lbs/Hr		Mercury
0.840	Lbs/Hr		NOX
0.020	gr/DRY FT3	filterable at 7% O2	PM10
20.000	PPMV	or 95% removal efficiency at 7% O2, measured as methane	VOC
004	THERMAL DESTRUCTOR 4 (PENN RAM 450)		
Emission Limit		Pollutant	
0.540	Lbs/Hr		Hydrogen Chloride (Anhydrous)
0.002	Lbs/Hr	or 0.68 grams/hr	Lead
0.001	Lbs/Hr	or 0.544 grams/hr	Mercury
0.850	Lbs/Hr		NOX
0.020	gr/DRY FT3	filterable	PM10
20.000	PPMV	or 95% removal efficiency at 7% O2, measured as methane	VOC
014	THERMAL DESTRUCTOR 5 (PENNRAM 550)		
Emission Limit		Pollutant	
0.540	Lbs/Hr		Hydrochloric Acid
0.002	Lbs/Hr		Lead
0.544	GRAMS/Hr		Mercury
0.940	Lbs/Hr		NOX
0.020	gr/DRY FT3	at 7% O2	PM10
20.000	PPMV	on dry basis as methane at 7% O2	VOC
005	SMALL BALL MILLS & SIFTERS		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	filterable or minimum removal efficiency of 99%	PM10
006	LARGE BALL MILLS & SIFTERS		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	filterable or minimum removal efficiency of 99%	PM10
007	SMALL MELT FURNACES		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	filterable	PM10
008	MELT FURNACE AREA #2		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	filterable	PM10

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
009	TILT MELT FURNACES		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	filterable	PM10
010	ACID ROOM PROCESS		
Emission Limit		Pollutant	
0.015	Lbs/Hr	from Acid Room Nox Scrubber (C21)	Chlorine
0.300	Lbs/Hr	from Acid Room General Scrubber (C11)	Chlorine
0.015	Lbs/Hr	from Acid Room Nox Scrubber (C21)	Hydrogen Chloride (Anhydrous)
0.300	Lbs/Hr	from Acid Room General Scrubber (C11)	Hydrogen Chloride (Anhydrous)
4.730	Lbs/Hr	from Acid Room Nox Scrubber (C21)	NOX
15.000	Tons/Yr	from Acid Room Nox Scrubber (C21)	NOX
020	SHREDDER (GRANULATOR)		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	filterable	PM10
201	EMERGENCY GENERATOR		
Emission Limit		Pollutant	
3.080	Tons/Yr	combined all emerg. generators	NOX
0.020	gr/DRY FT3	filterable	PM10

Site Emission Restriction Summary

Emission Limit			Pollutant
24.900 Tons/Yr	Combined total for all sources on site		NOX
24.900 Tons/Yr	Combined total for all sources on site		VOC
9.900 Tons/Yr	Single HAP, combined total for all sources on site		Hazardous Air Pollutants
24.900 Tons/Yr	Total HAP, combined total for all sources on site		Hazardous Air Pollutants

**SECTION H. Miscellaneous.**

(a) The previously issued plan approvals, listed below, serve as the basis for certain conditions set forth in this operating permit:

- No. 09-0196,
- No. 09-0196A,
- No. 09-0196D, and
- No. 09-0196E

(b) The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring, or recordkeeping:

- Laboratory (RFD #837).
- Sludge Dryer, natural gas-fired, ConRec, Model 56206S (RFD # 847).
- Bead blaster, at melt floor, Empire Model PF-3648, 400 cfm (RFD # 848).
- Boiler, natural gas-fired, 2.52 MMBtu/hr, Hurst Model S253-150-1 (RFD # 1735).
- Bead blasters (2 units), in stripping area, Empire Model EF-2448, 133 cfm (RFD # 1785).
- Two units of air handling units, Rupp Air System (50,000 scfm each), Model CFA230.
- One unit of air handling unit, Reznor (20,000 scfm), Model DFCV-127.
- Drying Oven with cooling chamber, 1.4 MMBtu/hr, gas-fired, Steelman Industrial Oven, Model #788.5-BA-C (RFD # 2846).
- Slurry Miser, a steam evaporator for recovering precious metals from wastewater (on the second floor).
- A HEPA Filter, venting indoors (consisting of 3 units of 24x23x12 HEPA filters, rated 2,000 cfm each)
- A sludge dryer, natural gas-fired with 0.125 MMBtu/hr capacity (RFD #4650)
- NOx Scrubber solution evaporator, for Source ID C21 (RFD #6904)
- Replacing large Paul Abbie Ball mill under Source ID 006 (RFD # 7059)

APS No. 777469; AUTH No. 998352, Date: December 2013 - Administrative Amendment for incorporating Plan Approval, No. 09-0196G (AUTH ID 957133), into the operating permit.

APS No. 777469; AUTH No. 1213598, Date: January 2018 - Administrative Amendment for incorporating Plan Approval, No. 09-0196I (AUTH ID 1193605 for replacing Thermal Destructor 1 and Afterburner 1 with Thermal Destructor 4 and afterburner 4), into the operating permit.

APS No. 777469; AUTH No. 1187956, Date: March 2020 - Operating Permit Renewal

- RFD Nos. 5029, 5030, 6276, & 7228, and other changes are incorporated into the permit, under Source IDs 005 & 006.
- Pre-shredder and Hammer Mill (installed under RFD # 4228) are incorporated into the permit, under Source ID 020.
- Taumblast Machine (installed under RFD #6418) is incorporated into the permit, under Source ID 008.
- Sludge Dryer and NOx scrubber evaporator (installed under RFD #4650 & 6904) are listed in Section H of this permit.
- Equipment installed under RFDs (6904, 7059, 7074, and 7228) are incorporated into the permit.

APS No. 777469; AUTH No. 1346596, April 2021- Minor modification to remove Destructor 2 (Wickberg) scrubber (Source ID C02C) and replace with identical scrubber (Source C02C-R). New Scrubber C02C-R was approved under RFD 8954 in January 2021. Replacement of C02C due to end of useful life.

APS No. 777469; AUTH No. 1375278. January, 2022 - Minor modification for the replacement of the 2-1.2 MMBtu/hr burners in the Wickberg thermal destructor 2 (Source #002) afterburner with 1- 2.0 MMBtu/hr burner. In RFD 9294, calculations show one 2.0 MMBtu/ hr burner can maintain the needed 1800 F by supplying 125 btu/sq in of chamber surface area. Section D, Source #002, Condition #004 has been changed to reflect new burner

APS No. 777469; AUTH No. 1432170. May, 2023 - Administrative Amendment for incorporating Plan Approval No. 09-0196H. This Plan Approval is for the installation and operation of the 300# Melt Furnace and its exhaust collection hoods under Source ID 008.

APS No. 777469; AUTH No. 1435904. May, 2023 - Administrative Amendment for incorporating Plan Approval No. 09-0196K. This Plan Approval is for the installation and operation of the replacement Acid Room NOx Scrubber C21. In addition to incorporating C21 into the permit, Source ID 002- Thermal Destructor 2 (Wickberg) is being removed from the permit. All controls for Thermal Destructor 2 (C02A, C14B, & C02C-R) have been removed.

APS No. 777469; AUTH No. 1559512. March 2026 - Administrative Amendment to incorporate Plan Approval 09-0196N for Thermal Destructor 5 (PennRam 550) (Source ID 014) into the permit. To align requirements for PennRam 550 with those of other thermal destructors and to show compliance with emissions limits, a condition to calculate and record monthly and 12-month rolling sum

**SECTION H. Miscellaneous.**

emissions has been added. Section C was updated to reflect changes to boilerplate permit conditions, especially the new malfunction condition with new reporting number.



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