



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

STATE ONLY OPERATING PERMIT

Issue Date: January 3, 2019

Effective Date: January 3, 2019

Expiration Date: January 2, 2024

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: 17-00044

Federal Tax Id - Plant Code: 20-1653091-1

Owner Information

Name: METALTECH INC  
Mailing Address: 3547 WATSON HWY  
DUBOIS, PA 15801-5479

Plant Information

Plant: METALTECH INC/SANDY TWP PLT  
Location: 17 Clearfield County 17946 Sandy Township  
SIC Code: 3399 Manufacturing - Primary Metal Products, Nec

Responsible Official

Name: ANTHONY M ZAFFUTO  
Title: PRES  
Phone: (814) 375 - 9399

Permit Contact Person

Name: ANTHONY M ZAFFUTO  
Title: PRES  
Phone: (814) 375 - 9399

[Signature] \_\_\_\_\_  
MUHAMMAD Q. ZAMAN, ENVIRONMENTAL PROGRAM MANAGER, NORTHCENTRAL REGION



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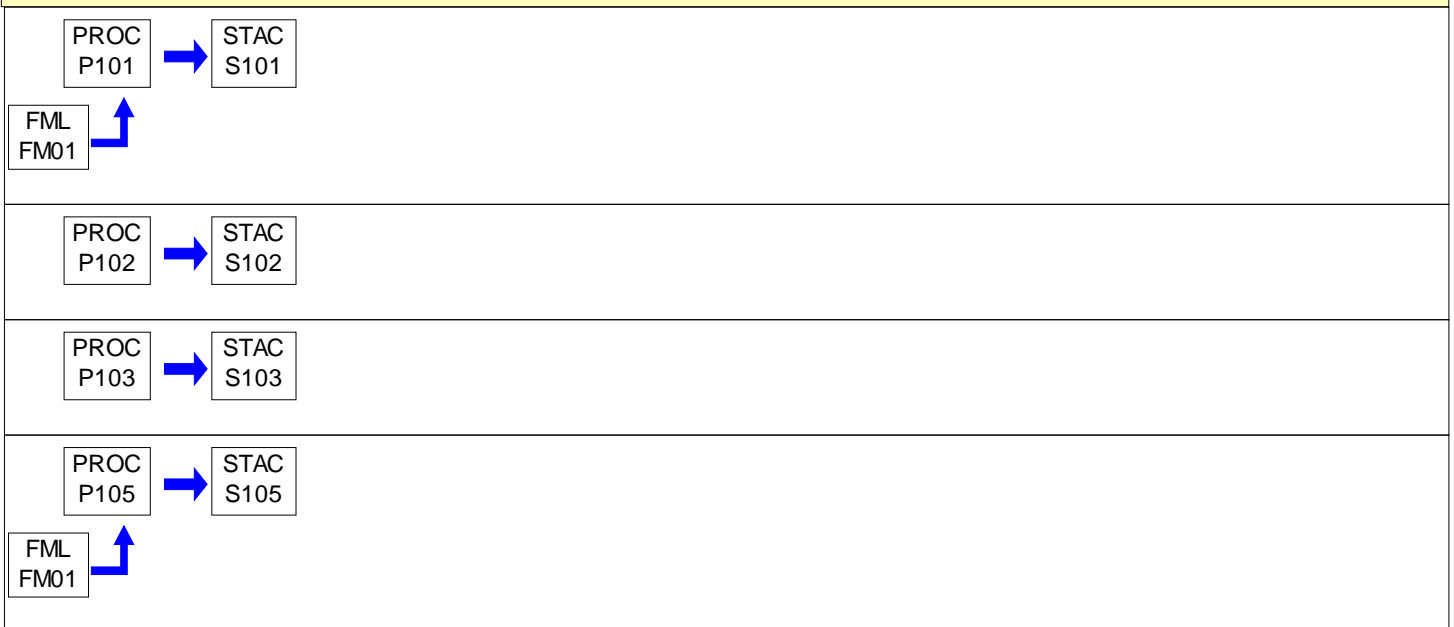
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Source ID	Source Name	Capacity/Throughput	Fuel/Material
P101	NATURAL GAS-FIRED SINTERING FURNACE (#2)		
P102	ELECTRIC SINTERING FURNACE (#5)		
P103	ELECTRIC SINTERING FURNACE (#1)		
P105	2 NATURAL GAS-FIRED LINDBERG ENDOTHERMIC GENERATORS		
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FM01	NATURAL GAS		
S101	FURNACE STACK		
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**PERMIT MAPS**



**PERMIT MAPS**

PROC  
P106 → STAC  
Z106

PROC  
P107 → STAC  
Z107

PROC  
P108 → STAC  
Z108

PROC  
P109 → STAC  
Z109

PROC  
P110 → STAC  
S110

PROC  
P111 → STAC  
S111

PROC  
P112 → STAC  
S112

**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)&(c)]****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 and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
- (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

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

- (a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
- (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,

**SECTION B. General State Only Requirements**

modification, revision, renewal, and re-issuance of each operating permit or part thereof.

(b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).

(1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.

(2) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.

(c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund".

**#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

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a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

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

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

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

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

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

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

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

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

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

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

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

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

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and



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significant operating permit modifications, under this permit, as outlined below:

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

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

(d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Section 127.14 (relating to exemptions)

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

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

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

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

**SECTION B. General State Only Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (a) The emissions are of minor significance with respect to causing air pollution.
- (b) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

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

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

**# 003 [25 Pa. Code §123.41]****Limitations**

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

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

**# 004 [25 Pa. Code §123.42]****Exceptions**

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

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

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

[Additional authority for this condition is derived from 25 Pa. Code § 127.14(a)(8)]

The total combined emission of volatile organic compounds from Sources P101, P102, P103, P105, P106 and P109 shall not equal or exceed 10 tons in any 12 consecutive month period.

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

While using metal containing lubricants, the particulate matter emissions from the furnace shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

- (a) Zinc Stearate to Zinc Oxide particulate matter = 0.129

**SECTION C. Site Level Requirements**

(b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**II. TESTING REQUIREMENTS.****# 007 [25 Pa. Code §139.1]****Sampling facilities.**

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

**# 008 [25 Pa. Code §139.11]****General requirements.**

(1) As specified in 25 Pa. Code Section 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department.

(2) As specified in 25 Pa. Code Section 139.11(2), the Department will consider test results for approval where sufficient information is provided to verify the source conditions existing at the time of the test and where adequate data is available to show the manner in which the test was conducted. Information submitted to the Department shall include, as a minimum, all of the following:

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

**III. MONITORING REQUIREMENTS.****# 009 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

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

The permittee shall maintain such records as are necessary to demonstrate that the particulate matter emission rate from sintering furnaces while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

**SECTION C. Site Level Requirements****# 011 [25 Pa. Code §135.5]****Recordkeeping**

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

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

**V. REPORTING REQUIREMENTS.****# 012 [25 Pa. Code §127.442]****Reporting requirements.**

- (a) The permittee shall report malfunctions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (b) Failures that are caused in part by poor maintenance or careless operation shall be reported as excess emissions or deviations from the operating permit requirements.
- (c) When the malfunction, excess emissions or deviation from this operating permit requirements poses an imminent danger to the public health, safety, welfare, or environment shall be reported by telephone to the Department and the County Emergency Management Agency within one (1) hour after the incident. The owner or operator shall submit a written report of instances of such incidents to the Department within three (3) business days of the telephone report.
- (d) Except as reported to the Department in accordance with 25 Pa. Code Chapter 139 and the Department's Continuous Source Monitoring Manual, any malfunction or excess emissions that is not subject to the notice requirements of subsection (c) of this operating permit condition shall be reported to the Department within 24 hours of discovery or the next business day. In notifying the Department, the permittee shall describe the following:
- (i) name and location of the facility;
  - (ii) nature and cause of the malfunction or breakdown;
  - (iii) time when the malfunction or breakdown was first observed;
  - (iv) expected duration of excess emissions;
  - (v) estimated rate of emissions; and
  - (vi) corrective actions or preventative measures taken.
- (e) The permittee shall notify the Department immediately when corrective measures have been accomplished.
- (f) Upon the request of the Department, the permittee shall submit a full written report to the Regional Air Program Manager within 15 days of the malfunction, excess emissions or deviation from the operating permit requirements.

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

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

**SECTION C. Site Level Requirements**

(b) A person who receives initial notification by the Department that an annual AIMS report is necessary shall submit an initial annual AIMS report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

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

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

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

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

**VII. ADDITIONAL REQUIREMENTS.****# 015 [25 Pa. Code §121.7]****Prohibition of air pollution.**

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

**# 016 [25 Pa. Code §123.31]****Limitations**

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

**# 017 [25 Pa. Code §129.14]****Open burning operations**

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

**VIII. COMPLIANCE CERTIFICATION.**

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

**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.



**SECTION D. Source Level Requirements**

Source ID: P101

Source Name: NATURAL GAS-FIRED SINTERING FURNACE (#2)

Source Capacity/Throughput:

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

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

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

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source P101 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The particulate matter emission rate from Source P101 while processing parts containing metal-bearing lubricant(s) shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

- (a) Zinc Stearate to Zinc Oxide particulate matter = 0.129
- (b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**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.**

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

Source P101 shall be equipped with instrumentation to continuously monitor the furnace temperature.

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

The permittee shall maintain such records as are necessary to demonstrate that the particulate matter emission rate from Source P101 while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

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

The permittee shall keep daily furnace logs including information about the amounts of hydrogen, nitrogen, and/or endothermic gas used as atmosphere to verify compliance the applicable work practice requirement.

**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.**

Source P101 shall be equipped with a flame curtain located between the parts entry and the pre-heat zone.

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

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

The stacks associated with Source P101 shall not be cleaned by using high temperature cleanup ("burn out") procedures.

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

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

Unless otherwise permitted pursuant to this Source ID condition #012, no lubricant or lubricant blend shall be used in the parts processing through this Source ID sintering furnace other than the following:

Mix Code - (Lubricant/Lubricant Blend)

-----  
 MTI-103 - (0.625% Acrawax, 0.375% zinc stearate)  
 MTI-403 - (0.5% Ferrolube, 0.5% zinc stearate)  
 MTI-100 - (0.75% Acrawax, 0.5% zinc stearate)  
 MTI-402 - (0.75% Acrawax, 0.25% zinc stearate)  
 MTI-400 - (0.75% Acrawax, 0.25% zinc stearate)  
 Amp-4 - (0.58% Acrawax, 0.27% zinc stearate)  
 MTI-101 - (0.75% Acrawax, 0.50% zinc stearate)  
 MTI-201 - (0.38% Kenolube, 0.625% Acrawax)  
 MTI-108 - (0.75% Acrawax, 0.375% zinc stearate)  
 MTI-116 - (0.58% Acrawax, 0.22% zinc stearate)  
 MTI-200 - (0.53% Acrawax, 0.27% zinc stearate)  
 MTI-203 - (0.75% Acrawax, 0.25% zinc stearate)  
 MTI-204 - (0.50% Acrawax, 0.25% zinc stearate)  
 5L - (0.52% Acrawax, 0.23% zinc stearate)  
 Arc-8 - (0.75% Acrawax, 0.25% zinc stearate)  
 BD-45 - (0.60% Acrawax, 0.9% zinc stearate)  
 AMB-6711 - (1.50% Acrawax)  
 AMB-2712 - (1.50% Acrawax)

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

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

The temperature of Source P101 shall not be allowed to exceed 2,100°F.

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

The atmosphere of Source P101 shall contain at least 3% hydrogen any time parts are being sintered.

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

Source P101 shall not be used to process parts which have previously been treated with oil.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.14(a)(8)(41)]

In addition to the above lubricants/lubricant blends, the permittee may only use the following lubricant or lubricant blend in the parts processing through this Source ID:

Mix Code - (Lubricant/Lubricant Blend)

-----

1. M101 - ((0.75% Acrawax)
2. M104 - (0.65% Acrawax)
3. M105 - (0.65% Acrawax)
4. M106 - (0.75% Acrawax)
5. M107 - (0.75% Acrawax)
6. M111 - (0.75% Acrawax)
7. M112 - (0.75% Acrawax)
8. M120 - (0.75% Acrawax)
9. M121 - (0.75% Acrawax)
10. M124 - (0.75% Acrawax)
11. M126 - (0.75% Acrawax)
12. M127R - (0.75% Acrawax)
13. M202 - (0.5% Acrawax)
14. M203 - (0.75% Acrawax)
15. M203HGS - (0.4% Acrawax)
16. M215 - (0.75% Acrawax)
17. M215M - (0.75% Acrawax)
18. M401 - (0.5% Acrawax, 0.25% Zinc Stearate)
19. M402 - (0.75% Acrawax)
20. M406 - (0.6% Kenolube)
21. M701 - (0.75% Acrawax)
22. M702 - (0.45% Acrawax)
23. M703 - (0.75% Acrawax)
24. M704 - (0.75% Acrawax)
25. M500 - (0.38% Lithium Stearate, 0.38% Acrawax)

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

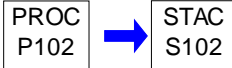
Source P101 is an 18" continuous belt, 1.5 million Btu per hour, natural gas-fired Lindberg powdered metal parts sintering furnace rated at 250 pounds per hour.

**SECTION D. Source Level Requirements**

Source ID: P102

Source Name: ELECTRIC SINTERING FURNACE (#5)

Source Capacity/Throughput:

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

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

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

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source P102 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The particulate matter emission rate from Source P102 while processing parts containing metal-bearing lubricant(s) shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

(a) Zinc Stearate to Zinc Oxide particulate matter = 0.129

(b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**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.**

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

Source P102 shall be equipped with instrumentation to continuously monitor the furnace temperature.

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

The permittee shall maintain such records as are necessary to demonstrate that the particulate matter emission rate from Source P102 while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

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

The permittee shall keep daily furnace logs including information about the amounts of hydrogen, nitrogen, and/or

**SECTION D. Source Level Requirements**

endothermic gas used as atmosphere to verify compliance the applicable work practice requirement.

**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.**

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

Unless otherwise permitted pursuant to this Source ID condition #012, no lubricant or lubricant blend shall be used in the parts processing through this Source ID sintering furnace other than the following:

Mix Code - (Lubricant/Lubricant Blend)

-----  
 MTI-103 - (0.625% Acrawax, 0.375% zinc stearate)  
 MTI-403 - (0.5% Ferrolube, 0.5% zinc stearate)  
 MTI-100 - (0.75% Acrawax, 0.5% zinc stearate)  
 MTI-402 - (0.75% Acrawax, 0.25% zinc stearate)  
 MTI-400 - (0.75% Acrawax, 0.25% zinc stearate)  
 Amp-4 - (0.58% Acrawax, 0.27% zinc stearate)  
 MTI-101 - (0.75% Acrawax, 0.50% zinc stearate)  
 MTI-201 - (0.38% Kenolube, 0.625% Acrawax)  
 MTI-108 - (0.75% Acrawax, 0.375% zinc stearate)  
 MTI-116 - (0.58% Acrawax, 0.22% zinc stearate)  
 MTI-200 - (0.53% Acrawax, 0.27% zinc stearate)  
 MTI-203 - (0.75% Acrawax, 0.25% zinc stearate)  
 MTI-204 - (0.50% Acrawax, 0.25% zinc stearate)  
 5L - (0.52% Acrawax, 0.23% zinc stearate)  
 Arc-8 - (0.75% Acrawax, 0.25% zinc stearate)  
 BD-45 - (0.60% Acrawax, 0.9% zinc stearate)  
 AMB-6711 - (1.50% Acrawax)  
 AMB-2712 - (1.50% Acrawax)

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

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

The temperature of Source P102 shall not be allowed to exceed 2,100°F.

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

The atmosphere of Source P102 shall contain at least 3% hydrogen any time parts are being sintered.

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

Source P102 shall not be used to process parts which have previously been treated with oil.

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

Source P102 shall be equipped with a flame curtain located between the parts entry and the pre-heat zone.

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

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

The stacks associated with Source P102 shall not be cleaned by using high temperature cleanup ("burn out") procedures.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.14(a)(8)(41)]

In addition to the above lubricants/lubricant blends, the permittee may only use the following lubricant or lubricant blend in the parts processing through this Source ID:

Mix Code - (Lubricant/Lubricant Blend)

-----

1. M101 - ((0.75% Acrawax)
2. M104 - (0.65% Acrawax)
3. M105 - (0.65% Acrawax)
4. M106 - (0.75% Acrawax)
5. M107 - (0.75% Acrawax)
6. M111 - (0.75% Acrawax)
7. M112 - (0.75% Acrawax)
8. M120 - (0.75% Acrawax)
9. M121 - (0.75% Acrawax)
10. M124 - (0.75% Acrawax)
11. M126 - (0.75% Acrawax)
12. M127R - (0.75% Acrawax)
13. M202 - (0.5% Acrawax)
14. M203 - (0.75% Acrawax)
15. M203HGS - (0.4% Acrawax)
16. M215 - (0.75% Acrawax)
17. M215M - (0.75% Acrawax)
18. M401 - (0.5% Acrawax, 0.25% Zinc Stearate)
19. M402 - (0.75% Acrawax)
20. M406 - (0.6% Kenolube)
21. M701 - (0.75% Acrawax)
22. M702 - (0.45% Acrawax)
23. M703 - (0.75% Acrawax)
24. M704 - (0.75% Acrawax)
25. M500 - (0.38% Lithium Stearate, 0.38% Acrawax)

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

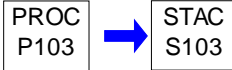
Source P102 is a 12" continuous belt, 86 kilowatt, electric-fired Sinterite model SRPM 12-4Z powdered metal parts sintering furnace rated at 250 pounds per hour.

**SECTION D. Source Level Requirements**

Source ID: P103

Source Name: ELECTRIC SINTERING FURNACE (#1)

Source Capacity/Throughput:

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

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

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

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source P103 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The particulate matter emission rate from Source P103 while processing parts containing metal-bearing lubricant(s) shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

- (a) Zinc Stearate to Zinc Oxide particulate matter = 0.129
- (b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**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.**

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

Source P103 shall be equipped with instrumentation to continuously monitor the furnace temperature.

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

The permittee shall maintain such records as are necessary to demonstrate that the particulate matter emission rate from Source P103 while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

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

The permittee shall keep daily furnace logs including information about the amounts of hydrogen, nitrogen, and/or

**SECTION D. Source Level Requirements**

endothermic gas used as atmosphere to verify compliance the applicable work practice requirement.

**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.**

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

Unless otherwise permitted pursuant to this Source ID condition #012, no lubricant or lubricant blend shall be used in the parts processing through this Source ID sintering furnace other than the following:

Mix Code - (Lubricant/Lubricant Blend)

-----  
 MTI-103 - (0.625% Acrawax, 0.375% zinc stearate)  
 MTI-403 - (0.5% Ferrolube, 0.5% zinc stearate)  
 MTI-100 - (0.75% Acrawax, 0.5% zinc stearate)  
 MTI-402 - (0.75% Acrawax, 0.25% zinc stearate)  
 MTI-400 - (0.75% Acrawax, 0.25% zinc stearate)  
 Amp-4 - (0.58% Acrawax, 0.27% zinc stearate)  
 MTI-101 - (0.75% Acrawax, 0.50% zinc stearate)  
 MTI-201 - (0.38% Kenolube, 0.625% Acrawax)  
 MTI-108 - (0.75% Acrawax, 0.375% zinc stearate)  
 MTI-116 - (0.58% Acrawax, 0.22% zinc stearate)  
 MTI-200 - (0.53% Acrawax, 0.27% zinc stearate)  
 MTI-203 - (0.75% Acrawax, 0.25% zinc stearate)  
 MTI-204 - (0.50% Acrawax, 0.25% zinc stearate)  
 5L - (0.52% Acrawax, 0.23% zinc stearate)  
 Arc-8 - (0.75% Acrawax, 0.25% zinc stearate)  
 BD-45 - (0.60% Acrawax, 0.9% zinc stearate)  
 AMB-6711 - (1.50% Acrawax)  
 AMB-2712 - (1.50% Acrawax)

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

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

The temperature of Source P103 shall not be allowed to exceed 2,100°F.

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

The atmosphere of Source P103 shall contain at least 3% hydrogen any time parts are being sintered.

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

Source P103 shall not be used to process parts which have previously been treated with oil.

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

Source P103 shall be equipped with a flame curtain located between the parts entry and the pre-heat zone.



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

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

The stacks associated with Source P103 shall not be cleaned by using high temperature cleanup ("burn out") procedures.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.14(a)(8)(41)]

In addition to the above lubricants/lubricant blends, the permittee may only use the following lubricant or lubricant blend in the parts processing through this Source ID:

Mix Code - (Lubricant/Lubricant Blend)

-----

1. M101 - ((0.75% Acrawax)
2. M104 - (0.65% Acrawax)
3. M105 - (0.65% Acrawax)
4. M106 - (0.75% Acrawax)
5. M107 - (0.75% Acrawax)
6. M111 - (0.75% Acrawax)
7. M112 - (0.75% Acrawax)
8. M120 - (0.75% Acrawax)
9. M121 - (0.75% Acrawax)
10. M124 - (0.75% Acrawax)
11. M126 - (0.75% Acrawax)
12. M127R - (0.75% Acrawax)
13. M202 - (0.5% Acrawax)
14. M203 - (0.75% Acrawax)
15. M203HGS - (0.4% Acrawax)
16. M215 - (0.75% Acrawax)
17. M215M - (0.75% Acrawax)
18. M401 - (0.5% Acrawax, 0.25% Zinc Stearate)
19. M402 - (0.75% Acrawax)
20. M406 - (0.6% Kenolube)
21. M701 - (0.75% Acrawax)
22. M702 - (0.45% Acrawax)
23. M703 - (0.75% Acrawax)
24. M704 - (0.75% Acrawax)
25. M500 - (0.38% Lithium Stearate, 0.38% Acrawax)

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

Source P103 is an 8" continuous belt, 30 kilowatt, electric-fired Sinterite model SRPM 8-22 powdered metal parts sintering furnace rated at 150 pounds per hour.

**SECTION D. Source Level Requirements**

Source ID: P105

Source Name: 2 NATURAL GAS-FIRED LINDBERG ENDOTHERMIC GENERATORS

Source Capacity/Throughput:

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

# 001 [25 Pa. Code §123.13]

**Processes**

The permittee shall not permit the emission from Source ID P105 into the outdoor atmosphere of particulate matter in a manner that the concentration in the effluent gas exceeds 0.04 grains per dry standard cubic foot.

# 002 [25 Pa. Code §123.21]

**General**

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source P105 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

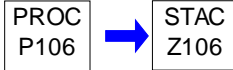
Source P105 is comprised of two 0.196 million Btu per hour, natural gas-fired Lindberg endothermic generators, each rated at 1,500 cubic feet of endothermic atmosphere per hour.

**SECTION D. Source Level Requirements**

Source ID: P106

Source Name: SIZING OPERATION

Source Capacity/Throughput:

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

The permittee shall not use more than 500 gallons of volatile organic compound-containing sizing fluids (Kensol 30 or an alternate material determined by the Department of Environmental Protection to have an equivalent, or lower, air contaminant emission potential) in Source P106 in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

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

- (1) The identity and amount of each individual volatile organic compound-containing sizing fluid used in Source P106 during each month as well as the volatile organic compound content of each such material.
- (2) The identity and amount of any spent volatile organic compound-containing sizing fluids shipped offsite, or otherwise disposed of in liquid form, during each month.

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

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

The permittee shall submit an annual report to the Department listing the following information:

- (1) The identity and amount of each individual volatile organic compound-containing sizing fluid used in Source P106 during each month of the prior year as well as the volatile organic compound content of each such material.
- (2) The identity and amount of any spent volatile organic compound-containing sizing fluids shipped offsite, or otherwise disposed of in liquid form, during each month of the prior year.

Each annual report shall be submitted to the Department by no later than March 1 of each calendar year (for the immediately-preceding January 1 through December 31 twelve consecutive month period).

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

The permittee shall not add anything other than 30W oil, to which there has been no reclaimed or waste oil or other waste materials added, to the volatile organic compound-containing sizing fluids used in Source P106.

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

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

All volatile organic compound-containing sizing fluids used in Source P106 shall be stored in closed containers when not in actual use.

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

The sizing fluids used in Source P106 shall not contain any hazardous air pollutants.

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

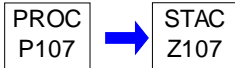
Source P106 is a powdered metal parts sizing operation incorporating a 20 ton Mitchell hand/auto sizing press and a 20 ton Eastern Machine hand/auto sizing press.

**SECTION D. Source Level Requirements**

Source ID: P107

Source Name: SINTERITE IMPREGNATOR

Source Capacity/Throughput:

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

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The impregnation oils used in Source P107 shall not contain any hazardous air pollutants.

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The total combined volatile organic compound emissions from Source P107 shall not exceed 8.0 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

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

(1) The identity and amount of each individual volatile organic compound-containing impregnation oil used in Source P107 during each month as well as the volatile organic compound content and the hazardous air pollutant content of each such material.

(2) The identity and amount of any spent volatile organic compound-containing impregnation oil shipped offsite, or otherwise disposed of in liquid form, during each month.

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

**V. REPORTING REQUIREMENTS.**

# 004 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall submit an annual report to the Department listing the following information:

(1) The identity and amount of each individual volatile organic compound-containing impregnation oil used in Source P107 during each month of the prior year as well as the volatile organic compound content and the hazardous air pollutant content of each such material.

(2) The identity and amount of any spent volatile organic compound-containing impregnation oil shipped offsite, or otherwise disposed of in liquid form, during each month of the prior year.

Each annual report shall be submitted to the Department by no later than March 1 of each calendar year (for the

**SECTION D. Source Level Requirements**

immediately-preceding January 1 through December 31 twelve consecutive month period).

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

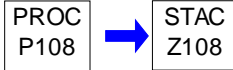
Source P107 is a two-tank Sinterite impregnator.

**SECTION D. Source Level Requirements**

Source ID: P108

Source Name: PARTS WASHER

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

The permittee shall maintain accurate and comprehensive records of the amount of solvent placed into Source P108 each month.

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

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

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

All such records shall be retained for at least two (2) years and shall be made available to the Department upon request. An invoice, bill of sale, certificate that corresponds to a number of sales, Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this section.

**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.**

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

Solvents containing hazardous air pollutants shall not be used in Source P108.

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

Source P108 shall have a permanent, conspicuous label summarizing the operating requirements specified in condition #006. In addition, the label shall list the following discretionary good operating practices:

- (1) Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having

**SECTION D. Source Level Requirements**

cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine.

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

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

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

Source P108 shall be equipped with a cover(s) that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. A perforated drain with a diameter of not more than 6 inches shall constitute an acceptable cover.

**# 006 [25 Pa. Code §129.63]****Degreasing operations**

Source P108 shall be operated in accordance with the following procedures:

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

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

(3) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the parts washer.

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

(5) Spills during solvent transfer and use of the parts washer shall be cleaned up immediately.

**# 007 [25 Pa. Code §129.63]****Degreasing operations**

Solvents with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater, measured at 20°C (68°F), shall not be used in Source P108 unless they contain no more than 5% volatile organic compounds, by weight.

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

Source P108 is a model PW26 BAC remote reservoir parts washer.

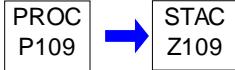


**SECTION D. Source Level Requirements**

Source ID: P109

Source Name: RUST INHIBITOR DIPPING OPERATION

Source Capacity/Throughput:

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

The permittee shall not use more than 2,000 gallons of volatile organic compound-containing rust inhibitors (Emblem Rust Prevent 150K or an alternate material determined by the Department of Environmental Protection to have an equivalent, or lower, air contaminant emission potential) in Source P109 in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

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

- (1) The identity and amount of each individual volatile organic compound-containing rust inhibitor used in Source P109 during each month as well as the volatile organic compound content of each such material.
- (2) The identity and amount of any spent volatile organic compound-containing rust inhibitors shipped offsite, or otherwise disposed of in liquid form, during each month.

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

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

The permittee shall submit an annual report to the Department listing the following information:

- (1) The identity and amount of each individual volatile organic compound-containing rust inhibitor used in Source P109 during each month of the prior year as well as the volatile organic compound content of each such material.
- (2) The identity and amount of any spent volatile organic compound-containing rust inhibitors shipped offsite, or otherwise disposed of in liquid form, during each month of the prior year.

Each annual report shall be submitted to the Department by no later than March 1 of each calendar year (for the immediately-preceding January 1 through December 31 twelve consecutive month period).

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The rust inhibitors used in Source P109 shall not contain any hazardous air pollutants.

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

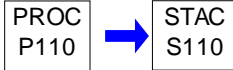
Source P109 is a rust inhibitor dipping operation.

**SECTION D. Source Level Requirements**

Source ID: P110

Source Name: ELECTRIC SINTERING FURNACE (#4)

Source Capacity/Throughput:

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

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source P110 in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot.

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

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source P110 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The particulate matter emission rate from Source P110 while processing parts containing metal-bearing lubricant(s) shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

- (a) Zinc Stearate to Zinc Oxide particulate matter = 0.129
- (b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

The permittee shall maintain such records as are necessary to demonstrate that the organic lubricant content of the parts processed in Source P110 does not exceed 0.75%, by weight, as well as such records as are necessary to demonstrate that the particulate matter emission rate from Source P110 while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

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

The permittee shall keep daily furnace logs including information about the amounts of hydrogen, nitrogen, and/or endothermic gas used as atmosphere to verify compliance the applicable work practice requirement.

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

The atmosphere of Source 110 shall contain at least 3% hydrogen any time parts are being sintered.

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

Source P110 shall not be used to process parts which have previously been treated with oil.

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

Source P110 shall be equipped with a flame curtain located between the parts entry and the pre-heat zone.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.14(a)(8)(41)]

No lubricant or lubricant blend shall be used in the parts processing through this Source ID sintering furnace other than the following:

Mix Code - (Lubricant/Lubricant Blend)

-----

1. M101 - ((0.75% Acrawax)
2. M104 - (0.65% Acrawax)
3. M105 - (0.65% Acrawax)
4. M106 - (0.75% Acrawax)
5. M107 - (0.75% Acrawax)
6. M111 - (0.75% Acrawax)
7. M112 - (0.75% Acrawax)
8. M120 - (0.75% Acrawax)
9. M121 - (0.75% Acrawax)
10. M124 - (0.75% Acrawax)
11. M126 - (0.75% Acrawax)
12. M127R - (0.75% Acrawax)
13. M202 - (0.5% Acrawax)
14. M203 - (0.75% Acrawax)
15. M203HGS - (0.4% Acrawax)
16. M215 - (0.75% Acrawax)
17. M215M - (0.75% Acrawax)
18. M401 - (0.5% Acrawax, 0.25% Zinc Stearate)
19. M402 - (0.75% Acrawax)
20. M406 - (0.6% Kenolube)
21. M701 - (0.75% Acrawax)
22. M702 - (0.45% Acrawax)
23. M703 - (0.75% Acrawax)
24. M704 - (0.75% Acrawax)

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

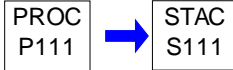
Source P110 is an 18" continuous belt, 100 kilowatt, electric-fired Sinterite model #18E-4Z sintering furnace, designated as furnace #4.

**SECTION D. Source Level Requirements**

Source ID: P111

Source Name: ELECTRIC SINTERING FURNACE (#3)

Source Capacity/Throughput:

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

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source P111 in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot.

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

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source ID P111 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The particulate matter emission rate from Source ID P111 while processing parts containing metal-bearing lubricant(s) shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

(a) Zinc Stearate to Zinc Oxide particulate matter = 0.129

(b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

The permittee shall maintain such records as are necessary to demonstrate that the organic lubricant content of the parts processed in Source ID P111 does not exceed 0.75%, by weight, as well as such records as are necessary to demonstrate that the particulate matter emission rate from Source ID P111 while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

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

The permittee shall keep daily furnace logs including information about the amounts of hydrogen, nitrogen, and/or endothermic gas used as atmosphere to verify compliance the applicable work practice requirement.

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

Source ID P111 furnace atmosphere shall contain at least 3% hydrogen any time parts are being sintered.

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

Source ID P111 shall not process any parts that are treated with oil.

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

Source ID P111 shall maintain an operating flame curtain between the part entry and pre-heat zone.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.14(a)(8)(41)]

No lubricant or lubricant blend shall be used in the parts processing through this Source ID sintering furnace other than the following:

Mix Code - (Lubricant/Lubricant Blend)

-----

1. M101 - ((0.75% Acrawax)
2. M104 - (0.65% Acrawax)
3. M105 - (0.65% Acrawax)
4. M106 - (0.75% Acrawax)
5. M107 - (0.75% Acrawax)
6. M111 - (0.75% Acrawax)
7. M112 - (0.75% Acrawax)
8. M120 - (0.75% Acrawax)
9. M121 - (0.75% Acrawax)
10. M124 - (0.75% Acrawax)
11. M126 - (0.75% Acrawax)
12. M127R - (0.75% Acrawax)
13. M202 - (0.5% Acrawax)
14. M203 - (0.75% Acrawax)
15. M203HGS - (0.4% Acrawax)
16. M215 - (0.75% Acrawax)
17. M215M - (0.75% Acrawax)
18. M401 - (0.5% Acrawax, 0.25% Zinc Stearate)
19. M402 - (0.75% Acrawax)
20. M406 - (0.6% Kenolube)
21. M701 - (0.75% Acrawax)
22. M702 - (0.45% Acrawax)
23. M703 - (0.75% Acrawax)
24. M704 - (0.75% Acrawax)

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Source ID P111 is an electric-fired Sinterite model #18E-4Z sintering furnace, which is designated as furnace #3 and rated at 330 pounds per hour.

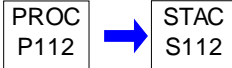


**SECTION D. Source Level Requirements**

Source ID: P112

Source Name: ELECTRIC SINTERING FURNACE (#6)

Source Capacity/Throughput:

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

The permittee shall not permit the emission of particulate matter into the outdoor atmosphere from Source P112 in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grains per dry standard cubic foot.

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

The permittee shall not permit the emission of sulfur oxides into the outdoor atmosphere from Source ID P112 in such a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The particulate matter emission rate from Source ID P112 while processing parts containing metal-bearing lubricant(s) shall not exceed 0.15 pounds per hour at any time (determined by mass balance or stack testing).

For mass balance purposes, the following conversion factors shall be used:

- (a) Zinc Stearate to Zinc Oxide particulate matter = 0.129
- (b) Lithium Stearate to Lithium Carbonate particulate matter = 0.15

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

The permittee shall maintain such records as are necessary to demonstrate that the organic lubricant content of the parts processed in Source ID P111 does not exceed 0.75%, by weight, as well as such records as are necessary to demonstrate that the particulate matter emission rate from Source ID P112 while processing parts containing metal-bearing lubricant(s) does not exceed 0.15 pounds per hour at any time.

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

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

The permittee shall keep daily furnace logs including information about the amounts of hydrogen, nitrogen, and/or endothermic gas used as atmosphere to verify compliance the applicable work practice requirement.

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

The metal powders processed in Source ID P112 shall not contain more than 0.75% organic lubricant, on a weight basis.

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

Source ID P112 furnace atmosphere shall contain at least 3% hydrogen any time parts are being sintered.

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

Source ID P112 shall not process any parts that are treated with oil.

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

Source ID P112 shall maintain an operating flame curtain between the part entry and pre-heat zone.

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

The metal powders processed in Source ID P112 shall not contain more than 0.25% zinc stearate lubricant, on a weight basis.

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

[Additional authority for this permit condition is derived from 25 Pa. Code Section 127.14(a)(8)(41)]

No lubricant or lubricant blend shall be used in the parts processing through this Source ID sintering furnace other than the following:

Mix Code - (Lubricant/Lubricant Blend)

- 
1. M101 - ((0.75% Acrawax)
  2. M104 - (0.65% Acrawax)
  3. M105 - (0.65% Acrawax)
  4. M106 - (0.75% Acrawax)
  5. M107 - (0.75% Acrawax)
  6. M111 - (0.75% Acrawax)
  7. M112 - (0.75% Acrawax)
  8. M120 - (0.75% Acrawax)
  9. M121 - (0.75% Acrawax)
  10. M124 - (0.75% Acrawax)
  11. M126 - (0.75% Acrawax)
  12. M127R - (0.75% Acrawax)
  13. M202 - (0.5% Acrawax)
  14. M203 - (0.75% Acrawax)
  15. M203HGS - (0.4% Acrawax)
  16. M215 - (0.75% Acrawax)
  17. M215M - (0.75% Acrawax)
  18. M401 - (0.5% Acrawax, 0.25% Zinc Stearate)
  19. M402 - (0.75% Acrawax)
  20. M406 - (0.6% Kenolube)

**SECTION D. Source Level Requirements**

- 21. M701 - (0.75% Acrawax)
- 22. M702 - (0.45% Acrawax)
- 23. M703 - (0.75% Acrawax)
- 24. M704 - (0.75% Acrawax)

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

Source ID P112 is an electric-fired Sinterite model #24E-4Z sintering furnace, which is designated as F6 and rated at 450 pounds per hour.

**SECTION D. Source Level Requirements**

Source ID: P113                      Source Name: ELECTRIC DRYING OVEN  
 Source Capacity/Throughput:

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

**# 001      [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall not use more than 400 gallons of volatile organic compound-containing cutting fluids (Soluble Oil with Biocide or an alternate material determined by the Department of Environmental Protection to have an equivalent, or lower, air contaminant emission potential) in Source P113 in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

**# 002      [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

When Source ID P113 is operating, the drying oven temperature shall be continually monitored by the permittee.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 003      [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

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

The identity and amount of each individual cutting fluid consumed in Source P113 during each month of the prior year as well as the volatile organic compound content of each such material.

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

**# 004      [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall keep daily records of the drying oven temperature to verify compliance the applicable work practice requirement.

**V. REPORTING REQUIREMENTS.**

**# 005      [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall submit an annual report to the Department listing the following information:

The identity and amount of each individual cutting fluid consumed in Source P113 during each month of the prior year as well as the volatile organic compound content of each such material.

Each annual report shall be submitted to the Department by no later than March 1 of each calendar year (for the immediately-preceding January 1 through December 31 twelve consecutive month period).

**VI. WORK PRACTICE REQUIREMENTS.**

**# 006      [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The cutting fluids consumed in Source P113 shall not contain any hazardous air pollutants.

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

The permittee shall not add anything other than water to the volatile organic compound-containing cutting fluids consumed in Source P113.

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

All volatile organic compound-containing cutting fluids used in Source P113 shall be stored in closed containers when not in actual use.

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

Source ID P113 electric drying oven operating temperature shall not exceed 600 degrees Fahrenheit.

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

Source P113 is an electric drying oven with an operating temperature not exceeding 600 degrees Fahrenheit. It is vented to the outdoor atmosphere through one of the buildings roof vents.



**SECTION E. Alternative Operation Requirements.**

No Alternative Operations exist for this State Only facility.

**SECTION F. Emission Restriction Summary.**

Source Id	Source Description		
P101	NATURAL GAS-FIRED SINTERING FURNACE (#2)		
<b>Emission Limit</b>			
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.150	Lbs/Hr		TSP
P102	ELECTRIC SINTERING FURNACE (#5)		
<b>Emission Limit</b>			
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.150	Lbs/Hr		TSP
P103	ELECTRIC SINTERING FURNACE (#1)		
<b>Emission Limit</b>			
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.150	Lbs/Hr		TSP
P105	2 NATURAL GAS-FIRED LINDBERG ENDOTHERMIC GENERATORS		
<b>Emission Limit</b>			
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
P107	SINTERITE IMPREGNATOR		
<b>Emission Limit</b>			
8.000	Tons/Yr		VOC
P110	ELECTRIC SINTERING FURNACE (#4)		
<b>Emission Limit</b>			
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP
0.150	Lbs/Hr		TSP

**Site Emission Restriction Summary**

Emission Limit	Pollutant	
10.000 Tons/Yr	total combined emissions from Sources P101, P102, P103, P105, P106 and P109	VOC



**SECTION G. Miscellaneous.**





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

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