



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

TITLE V/STATE OPERATING PERMIT

Issue Date:	August 19, 2019	Effective Date:	November 3, 2022
Revision Date:	November 3, 2022	Expiration Date:	August 18, 2024
Revision Type:	Amendment		

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 applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 46-00037

Federal Tax Id - Plant Code: 45-3504668-1

Owner Information

Name: GLOBAL ADVANCED METALS USA INC
Mailing Address: PO BOX 1608
COUNTY LINE RD
BOYERTOWN, PA 19512-6608

Plant Information

Plant: GLOBAL ADVANCED METALS USA/BOYERTOWN
Location: 46 Montgomery County 46924 Douglass Township
SIC Code: 3339 Manufacturing - Primary Nonferrous Metals, Nec

Responsible Official

Name: MARK LACKEY
Title: FACILITY GENERAL MGR
Phone: (610) 369 - 8175 Email: MLackey@globaladvancedmetals.com

Permit Contact Person

Name: JIM AMMEND
Title: S, H, & E SPECIALIST
Phone: (610) 369 - 8647 Email: JAmmend@globaladvancedmetals.com

[Signature] _____
JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER



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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
031	SUPERIOR BOILER 1	25.100 MMBTU/HR	
		25.100 MCF/HR	NATURAL GAS
		180.000 Gal/HR	#2 Oil
032	SUPERIOR BOILER 2	50.300 MMBTU/HR	
		359.000 Gal/HR	#2 Oil
		50.300 MCF/HR	Natural Gas
034	JOHNSTON BOILER 3	62.800 MMBTU/HR	
		62.800 MCF/HR	Natural Gas
		450.000 Gal/HR	#2 Oil
050	UNITS BURN GAS 1 SUBCATEGORY (<5 MMBTU/HR)		
040	EXISTING EMERGENCY SI RICE (<=500HP)		
041	EXISTING EMERGENCY CI RICE (<=500HP)		
042	EXISTING EMERGENCY CI RICE (>500HP)		
044	NEW EMERGENCY SI ICE		
101	TANTALUM RECYCLE DIGESTION (B-87)	N/A	TANTALUM
102	TANTALUM SALTS PROCESS (B-19)	N/A	TANTALUM
109	TA ACID LEACHING/DRYING (B-47/101)	N/A	TANTALUM POWDER
111	WIRE CLEANING PROCESS (B-58)	N/A	TANTALUM METAL
		N/A	Natural Gas
115	POWDER PACKAGING & MILLING OPERATIONS	N/A	TANTALUM
123	ORE DIGESTION (B-73)	N/A	T/ACB OXIDE
124	EXTRACTION PROCESS (B-74)	N/A	TANT/COL.SOLNS
126	SODIUM REDUCTION PROCESS (B-49)		
201	WASTEWATER TREATMENT PLANT	5,833.000 Gal/HR	WASTE WATER
210	RAFFINATE SOLIDIFICATION PROCESS	417.000 Gal/HR	RAFFINATE
36-1	BLDG. 36/101	N/A	TANTALUM POWDER
C01	B-87 PACKED TOWER SCRUBBER		
C02	B-19 PACKED TOWER SCRUBBER		
C06	B-47/101 PACKED TOWER SCRUBBER		
C08	B-58 PACKED TOWER SCRUBBER		
C100	MISC. DUST COLLECTORS		
C109	B 47 VAPOR RECOVERY UNIT		
C109B	ROTOCLONE WET DUST COLLECTOR (AAF)		
C115-1	BLDG 115 AAF ROTOCLONE WET DUST COLLECTOR		
C115-2	BLDG 115 TRIMER WET DUST COLLECTOR		
C15	B-73 PACKED TOWER SCRUBBER		
C16	B-74 PACKED TOWER SCRUBBER		
C19-2	B-19 DUST COLLECTOR		
C210-1	SURGE TANK SCRUBBER (PACKED BED)		
C210-2	MIX TANK SCRUBBER (VENTURI EDUCTOR)		

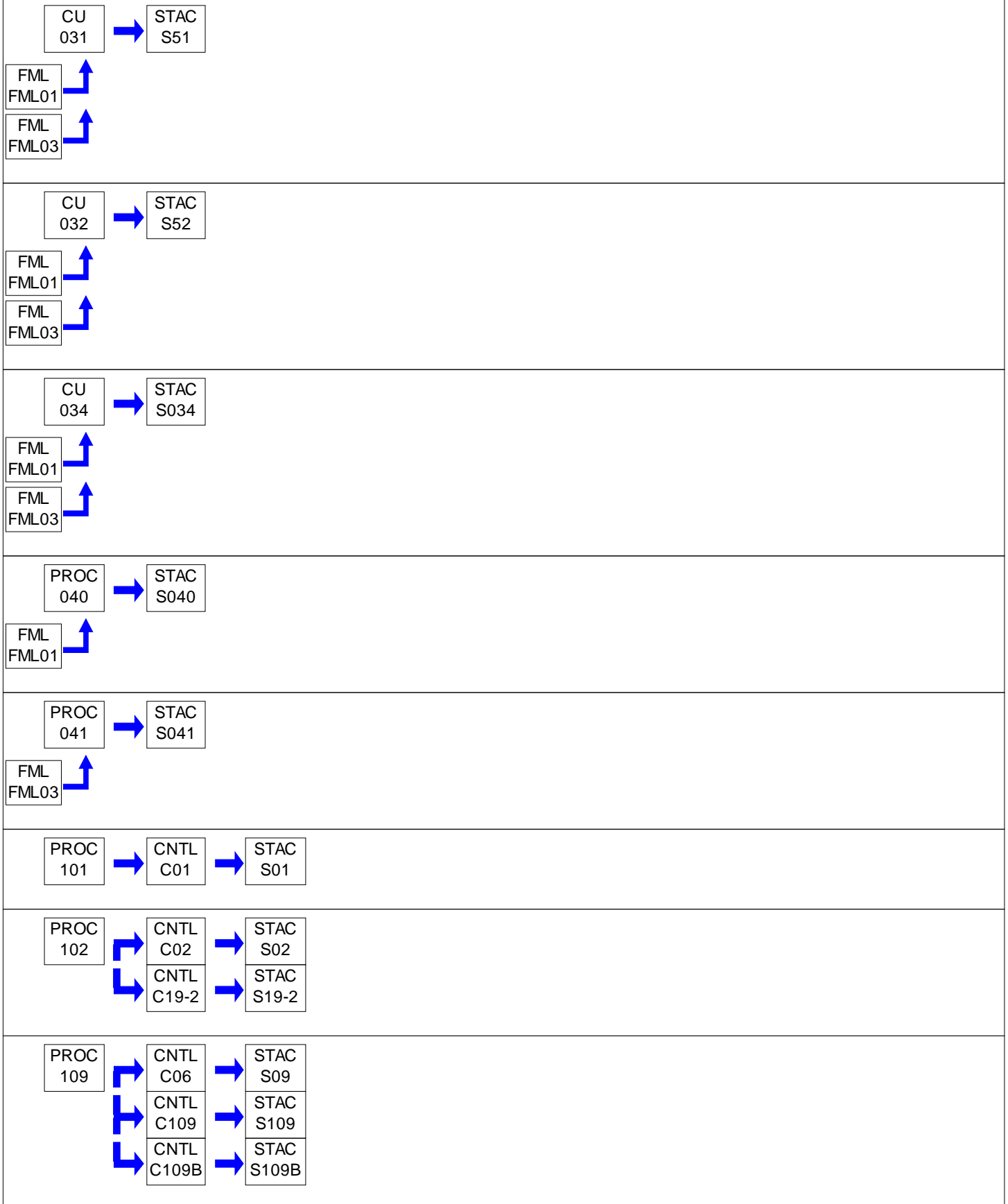
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
C210-3	FABRIC FILTERS FOR DAY BINS AND LIME STORAGE SILO		
C26A	B-49 DRY DUST COLLECTOR		
C26B	B-49 PACKED TOWER SCRUBBER		
C26C	B-49 MIST ELIMINATOR		
C36-1	WET DUST COLLECTOR		
FML01	NATURAL GAS LINE		
FML03	#2 OIL STORAGE		
S01	BUILDING 87 SCRUBBER STACK		
S02	BUILDING 19 SCRUBBER STACK		
S034	BOILER 3 STACK		
S040	NG EMER GENERATORS STACK		
S041	DIESEL EMER GENERATORS STACK		
S09	BUILDING 47/101 SCRUBBER STACK		
S109	B 47 VRU STACK		
S109B	ROTOCLONE WET DUST COLLECTOR STACK		
S11	BUILDING 58 SCRUBBER STACK		
S115-1	BLDG 115 AAF SIZE 4 WET DUST COLLECTOR STACK		
S115-2	BLDG 115 AAF SIZE 6 WET DUST COLLECTOR STACK		
S126A	B-49 DRY DUST COLLECTOR STACK		
S126B	B-49 PACKED TOWER SCRUBBER STACK		
S126C	B-49 MIST ELIMINATOR STACK		
S19-2	B-19 DUST COLLECTOR STACK		
S210-1	SURGE TANK SCRUBBER STACK		
S210-2	MIX TANK SCRUBBER STACK		
S210-3	FABRIC FILTER STACKS		
S22	BUILDING 73 SCRUBBER STACK		
S23	BUILDING 74 SCRUBBER STACK		
S36-1	WET DUST COLLECTOR STACK		
S51	BOILER 1 STACK		
S52	BOILER 2 STACK		
S55	MISC. DC STACK		
Z201	WWTP FUGITIVE		
Z210	FILTER CAKE STORAGE BAY FUGITIVE		

PERMIT MAPS

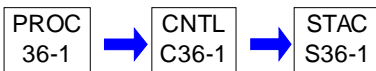
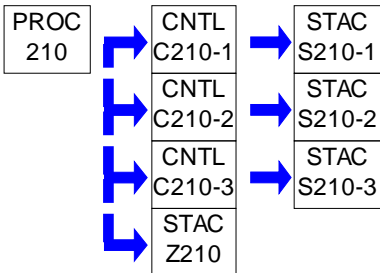
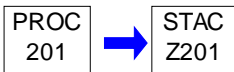
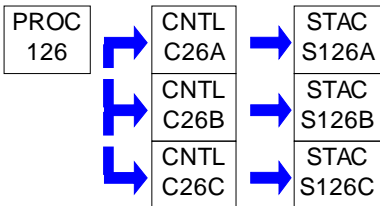
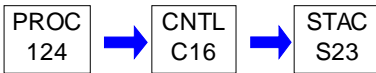
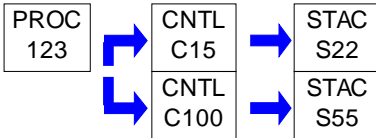
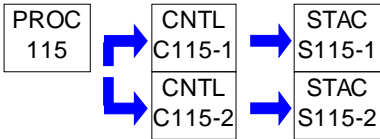


PERMIT MAPS





PERMIT MAPS



**SECTION B. General Title V 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 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 121.7]**Prohibition of Air Pollution**

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]**Property Rights**

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

#004 [25 Pa. Code § 127.446(a) and (c)]**Permit Expiration**

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. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V 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. 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.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]**Permit Renewal**

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(c) 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. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) 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 during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]**Transfer of Ownership or Operational Control**

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

- (1) The Department determines that no other change in the permit is necessary;
- (2) 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,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by

**SECTION B. General Title V Requirements**

the Department.

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]**Inspection and Entry**

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

- (1) Enter at reasonable times upon the permittee's premises where a Title V 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 or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, 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, 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.

(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.

#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]**Compliance Requirements**

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) 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 to the source are 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 Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]**Need to Halt or Reduce Activity Not a Defense**

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

**SECTION B. General Title V Requirements****#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]****Duty to Provide Information**

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]**Reopening and Revising the Title V Permit for Cause**

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]**Reopening a Title V Permit for Cause by EPA**

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#013 [25 Pa. Code § 127.522(a)]**Operating Permit Application Review by the EPA**

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

**SECTION B. General Title V Requirements****#014 [25 Pa. Code § 127.541]****Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#015 [25 Pa. Code §§ 121.1 & 127.462]**Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#016 [25 Pa. Code § 127.450]**Administrative Operating Permit Amendments**

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

#017 [25 Pa. Code § 127.512(b)]**Severability Clause**

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

#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]**Fee Payment**

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

**SECTION B. General Title V Requirements**

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

(e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.

- (1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.
- (2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.
- (3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

#019 [25 Pa. Code §§ 127.14(b) & 127.449]**Authorization for De Minimis Emission Increases**

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. 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.

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

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

- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act 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 or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

- (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.

**SECTION B. General Title V Requirements**

(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, liquefied petroleum gas 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.

(d) 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 (b)(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 the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(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 allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical 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.

#020 [25 Pa. Code §§ 127.11a & 127.215]**Reactivation of Sources**

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.

(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).

#021 [25 Pa. Code §§ 121.9 & 127.216]**Circumvention**

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the

**SECTION B. General Title V Requirements**

phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) 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 this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]**Submissions**

(a) 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 on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Enforcement & Compliance Assurance Division
Air, RCRA and Toxics Branch (3ED21)
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]**Sampling, Testing and Monitoring Procedures**

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#024 [25 Pa. Code § 127.513]**Compliance Certification**

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of

**SECTION B. General Title V Requirements**

the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

#025 [25 Pa. Code §§ 127.511 & Chapter 135]**Recordkeeping Requirements**

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

- (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 the 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. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#026 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]**Reporting Requirements**

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

**SECTION B. General Title V Requirements****#027 [25 Pa. Code § 127.3]****Operational Flexibility**

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

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

#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]**Risk Management**

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

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

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

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

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

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

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

- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

**SECTION B. General Title V Requirements**

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

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]**Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]**Permit Shield**

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

#031 [25 Pa. Code §135.3]**Reporting**

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

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

#032 [25 Pa. Code §135.4]**Report Format**

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

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

Except as authorized elsewhere in this Permit, no person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

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

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) 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;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) sources and classes of sources other than those identified in (a)-(h), 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:
 - (1) the emissions are of minor significance with respect to causing air pollution; and
 - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]**Limitations**

{MALODOR EMISSIONS}

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

005 [25 Pa. Code §123.41]**Limitations**

**SECTION C. Site Level Requirements**

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

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

006 [25 Pa. Code §123.42]**Exceptions**

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

- (a) When the presence of uncombined water is the only reason for failure to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

007 [25 Pa. Code §127.218.]**PALs.**

The VOC emissions from the facility shall not exceed the PAL of 241.7 tons per 12-month rolling total, calculated on a monthly basis in accordance with the provisions of Monitoring and Recordkeeping Requirements of Section C of this Operating Permit, without first undergoing major New Source Review (NSR). This PAL shall include emissions of VOC from all emission units at the facility specified below:

- i. Facility wide methyl isobutyl ketone (MIBK) emissions
- ii. Facility wide ethanol special denatured alcohol (SDA)
- iii. Facility wide antifreeze coolant (propylene glycol) usage
- iv. Facility wide VOC emissions from incomplete combustions
- v. Miscellaneous sources

008 [25 Pa. Code §129.14]**Open burning operations**

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

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

Throughput Restriction(s).**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The production of Potassium Tantalum Fluoride (KTaF) shall not exceed 4.6 million pounds per year on a twelve (12) month rolling sum.

**SECTION C. Site Level Requirements****II. TESTING REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

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

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

III. MONITORING REQUIREMENTS.**# 011 [25 Pa. Code §123.43]****Measuring techniques**

{VISIBLE EMISSION MONITORING}

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.

012 [25 Pa. Code §127.218.]**PALs.**

(a) The permittee shall monitor the following information and record the information into the Department approved VOC PAL Tracking System:

i. MIBK (methyl isobutyl ketone)

Amount of MIBK used from bulk tanks in gallons or pounds
 Amount of MIBK shipped offsite for recycle or disposal in gallons or pounds
 MIBK contents for both used and shipped are 100%.

ii. Ethanol SDA (special denatured alcohol)

Amount of ethanol SDA used in gallons or pounds
 Amount of ethanol SDA reclaimed in gallons or pounds
 Ethanol contents for both added and reclaimed are 100%.

iii. VOC from other chemicals

Amount of each chemical (other than plant storeroom chemicals) used in gallons or pounds
 VOC content of each chemical (other than plant storeroom chemicals) in pounds/gallon

iv. Coolant

Amount of coolant added to process equipment in gallons or pounds
 Amount of coolant removed from process equipment in gallons or pounds
 VOC contents of the coolants in pounds/gallon

**SECTION C. Site Level Requirements**

v. Emergency generator fuel usages

Diesel usage in gallons
Natural gas usage in standard cubic feet

vi. Boiler/heater fuel usages

Natural gas usage in standard cubic feet for Boiler No. 3
No.2 fuel oil usage in gallons for Boiler No. 3

Natural gas usage in standard cubic feet for other boilers and/or heaters
No. 2 and No.6 fuel oil usages in gallons for other boilers and/or heaters

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

- (a) The permittee shall monitor the amount of KTaF produced monthly.
- (b) The permittee shall monitor the facility, once per operating day, for the following:
- (1) Odors which may be objectionable (as per 25 Pa. Code §123.31).
 - (2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42).
 - (3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2).
- (c) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
- (1) Be investigated;
 - (2) Be reported to the facility management, or individual(s) designated by the permittee;
 - (3) Have appropriate corrective action taken (for emissions that originate on-site); and
 - (4) Be recorded in a permanent written log.
- (d) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly for the next six month period.
- (e) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.
- (f) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification, complaints, monitoring results, and/or Department findings.

Note: On April 30, 2009, DEP approved, through the issuance of Operating Permit renewal (AUTH ID 644666), the permittee's request for monitoring the facility on a weekly basis.

IV. RECORDKEEPING REQUIREMENTS.**# 014 [25 Pa. Code §127.218.]****PALs.**

- (a) The requirements for VOC PAL Tracking System are stated in Section C of this Operating Permit under 25 Pa. Code §127.218. The VOC PAL Tracking System is approved by the Department. Any changes to the requirements of the VOC PAL Tracking System shall be approved by the Department prior to implementation.
- (b) The permittee shall maintain sufficient records to demonstrate compliance with the requirements of 25 Pa. Code §127.218 and this VOC PAL. The permittee shall keep records of VOC emissions for each source category and facility wide on a monthly basis and as a 12-month rolling total. The VOC emissions records shall be generated within 30 days from the end of each previous month. The VOC emissions for each source category shall be calculated as follows:
- i. MIBK (methyl isobutyl ketone) emissions

**SECTION C. Site Level Requirements**

MIBK used - MIBK shipped offsite for recycle or disposal = MIBK emitted

ii. Ethanol SDA (special denatured alcohol) emissions

Ethanol SDA used - Ethanol SDA reclaimed = Ethanol SDA emitted

iii. VOC emissions from other chemicals that contain VOC

VOC emission factor for plant storeroom chemicals used is 200 lb/month*

(*: based on plant storeroom chemical usage study conducted in 2009 - 2010 using the highest monthly value recorded during the study of 160 lb and adding a contingency amount of 25%)

VOC emissions for other chemicals used = VOC emitted

iv. VOC emissions from coolant usage

VOC in coolant added - VOC in used coolant removed = VOC emitted

v. VOC emissions from emergency generator fuel usages

Engines 1 and 2 (Source ID 041) VOC emission factor for diesel industrial engines is 0.35 lb/MMBtu (AP-42 Table 3.3-1)

Engine 3 (Source ID 042) VOC Emission Factor for large stationary diesel engines of 0.09 lb/MMBtu (AP-42 Table 3.4-1)

Engines 4 – 8 (Source IDs 040 and 044) VOC Emission Factors for 4-stroke rich burn natural gas fired engines of 2.96 E-02 lb/MMBtu (AP-42 Table 3.2-3).

VOC emission factor for natural gas reciprocating engines is 0.118lb/MMBtu (AP-42Ch.3.2)

vi. VOC emissions from boiler fuel usages

VOC emission factors for boilers and/or heaters are those in AP-42 Ch.1.

(c) The emission calculations shall include emissions from startups, shutdowns, and malfunctions as per 25 Pa. Code §127.218(g)(4).

(d) The permittee shall keep a copy of the following records for the duration of the PAL effective period and 5 years after the PAL permit expires:

- i. A copy of the PAL permit application and applications for revisions to the PAL permit.
- ii. Each annual certification of compliance required under Title V of the Clean Air Act (42 U.S.C.A. Sections 7661--7661f) and regulations adopted under the act and the data relied on in certifying the compliance.

(e) The permittee shall keep the following records on a monthly basis:

i. MIBK (methyl isobutyl ketone)

MIBK used in gallons or pounds

MIBK shipped offsite for recycle or disposal in gallons or pounds

MIBK contents in pounds/gallon for both used and shipped

ii. Ethanol SDA (special denatured alcohol)

**SECTION C. Site Level Requirements**

Ethanol SDA used
 Ethanol SDA reclaimed
 Ethanol contents in pounds/gallon for both used and reclaimed

iii. VOC from other chemicals

Amount of each chemicals used in gallons or pounds
 VOC content of each chemical in pounds/gallon

iv. Coolant

Coolant added to process equipment in gallons or pounds
 Coolant removed from process equipment in gallons or pounds
 VOC contents of the coolants in pounds/gallon

v. Emergency generator fuel usages

Diesel usage in gallons
 Natural gas usage in standard cubic feet

vi. Boiler fuel usages

Natural gas usage in standard cubic feet for Boiler No. 3
 No.2 fuel oil usage in gallons for Boiler No. 3

Natural gas usage in standard cubic feet for other boilers and/or heaters
 No. 2 fuel oil usage in gallons for other boilers and/or heaters

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

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

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

(b) The permittee shall record the amount of KTaF produced monthly as well as twelve (12) month rolling sum.

(c) Within sixty (60) days after permit issuance, the permittee shall submit, to the Department for approval, any revised recordkeeping formats required in this Operating Permit.

V. REPORTING REQUIREMENTS.**# 016 [25 Pa. Code §127.218.]****PALs.**

The permittee shall comply with applicable reporting and notification requirements specified in 25 Pa. Code §127.218(o). The due dates for submittal of semiannual monitoring reports required by 25 Pa. Code §127.218(o)(1) shall coincide with the due dates for the annual and semiannual deviation reports in accordance with the provisions of reporting Requirements in Section C of this Operating Permit.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

- (a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- (b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.
- (c) The report shall describe the following:
- (1) Name, permit or authorization number, and location of the facility;
 - (2) Nature and cause of the malfunction, emergency or incident;
 - (3) Date and time when the malfunction, emergency or incident was first observed;
 - (4) Expected duration of excess emissions;
 - (5) Estimated rate of emissions; and
 - (6) Corrective actions or preventative measures taken.
- (d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.
- (e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.
- (f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.
- (g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.
- (h) The permittee shall submit the following reports:
- (1) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certificate of compliance shall be submitted to the Department in paper form DEP electronically, and to EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov. The subject line shall read: "TVOP No. 46-00037, GLOBAL ADVANCED METALS USA INC."
 - (2) A semi-annual deviation report to DEP, due by October 1 of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

**SECTION C. Site Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 018 [25 Pa. Code §123.1]
Prohibition of certain fugitive emissions**

A person responsible for any source specified in Condition #002, of this Section, shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (a) Use, where possible, of water or suitable chemicals, as approved by the Department, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (b) Application of asphalt, water, or other suitable chemicals, as approved by the Department, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (c) Paving and maintenance of roadways.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

- (a) The permittee may not modify any source identified in Section A, of this permit, prior to obtaining Department approval, except those modifications authorized by Condition #017(g), of Section B, of this permit.
- (b) The permittee shall expeditiously, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A, of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.
- (c) The permittee shall ensure that the source(s) and air pollution control device(s), listed in Section A and Section G, where applicable, of this permit, are operated and maintained in a manner consistent with good operating practices, and in accordance with manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.**# 020 [25 Pa. Code §127.218.]
PALs.**

- (a) This PAL is effective for a 10 year period beginning with the issue date of this TVOP renewal.
- (b) This PAL permit remains in effect if the permittee applies to renew this PAL in accordance with 25 Pa. Code Section 127.218(k) before the end of the PAL effective period, and until the Department issues a revised PAL permit.
- (c) This PAL permit expires at the end of the PAL effective period, ten years from the issue date of this TVOP renewal, if it is not renewed in accordance with the procedures in 25 Pa. Code Section 127.218(k), the permittee shall comply with 25 Pa. Code Section 127.218(j).
- (d) Any change that would result in an increase over the PAL shall be subject to the requirements of 25 Pa. Code Chapter 127, Subchapter E. New Source Review.
- (e) A new source that requires a plan approval after the effective date of this PAL Operating Permit shall use the Best Available Technology (BAT) to control emissions of VOC as per 25 Pa. Code Section 127.218(g)(10).
- (f) Any new source, or sources that are modified or reactivated, or air cleaning devices that are installed at the facility after this PAL effective date shall obtain all required permits or approvals before construction, modification, reactivation, and operation pursuant to all applicable USEPA and PADEP major and minor new source review requirements with the exception of 25 Pa. Code Chapter 127, Subchapter E, relating to VOC emissions. Compliance with this VOC PAL and the terms and conditions of this Operating Permit shall constitute compliance with the requirements of 25 Pa. Code Chapter

**SECTION C. Site Level Requirements**

127, Subchapter E for VOC.

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

***** Permit Shield In Effect *****

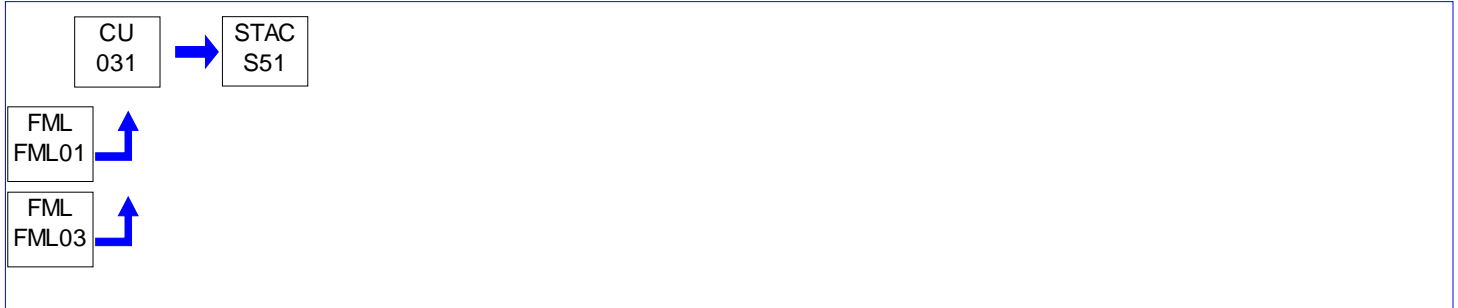
**SECTION D. Source Level Requirements**

Source ID: 031

Source Name: SUPERIOR BOILER 1

Source Capacity/Throughput:	25.100 MMBTU/HR	
	25.100 MCF/HR	NATURAL GAS
	180.000 Gal/HR	#2 Oil

Conditions for this source occur in the following groups: 1
2

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]**

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.512(h) and 129.97(b)(1), and 40 C.F.R. §§63.7500 and 63.7515(d).]

As per 40 C.F.R. §63.7540(a)(10), the permittee must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified below.

**SECTION D. Source Level Requirements**

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown);
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by DEP or EPA Administrator, an annual report containing the information in paragraphs (A) through (C) below.
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

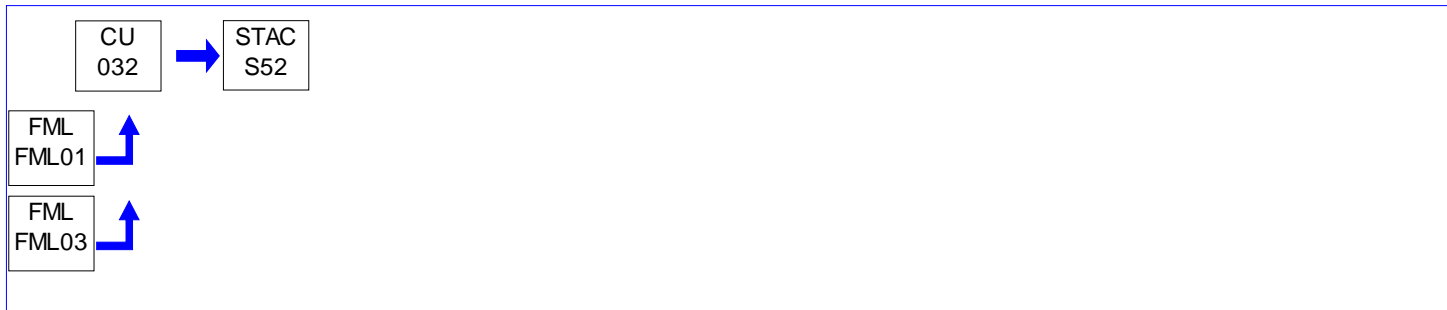
Source ID: 032

Source Name: SUPERIOR BOILER 2

Source Capacity/Throughput:	50.300	MMBTU/HR	
	359.000	Gal/HR	#2 Oil
	50.300	MCF/HR	Natural Gas

Conditions for this source occur in the following groups: 1

2

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]

The throughput of the natural gas shall not exceed 425,000 thousand cubic feet (mcf) per year on a twelve month rolling basis.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

002 [25 Pa. Code §129.93]
Presumptive RACT emission limitations

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.512(h).]

Compliance with annual tune-up specified in 40 CFR §63.7540(a)(10)(i) through (vi) deemed compliance with paragraphs (a) and (b) below:

(a) The permittee shall perform an annual tune-up on the combustion process for this boiler. The annual tune-up shall consist of, at a minimum, the following:

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

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

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

(b) The annual combustion tune-up shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-3401/1-83-023) or equivalent procedures approved by the Department in writing.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.512(h) and 129.93, and 40 C.F.R. §§63.7500 and 63.7515(d).]

As per 40 C.F.R. §63.7540(a)(10), the permittee must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified below.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown);

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by DEP or EPA Administrator, an annual report containing the information in paragraphs (A) through (C) below.

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;

(B) A description of any corrective actions taken as a part of the tune-up; and

**SECTION D. Source Level Requirements**

(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 034

Source Name: JOHNSTON BOILER 3

Source Capacity/Throughput:	62.800 MMBTU/HR	
	62.800 MCF/HR	Natural Gas
	450.000 Gal/HR	#2 Oil

Conditions for this source occur in the following groups: 2

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

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1)

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from any combustion unit, in the Southeast Air Basin, in excess of 1.2 pounds per million Btu of heat input, pursuant to 25 Pa. Code §123.22(e)(1).

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

(a) When firing Natural Gas, the Nitrogen oxide (NO_x) emissions shall not exceed the limitations specified below

NO_x: 30 ppmvd@ 3% oxygen, 0.035 lb/MMBTU, 2.20 pounds per hour and 34.09 tons per year on a twelve (12) month rolling sum.

(b) When firing Number 2 fuel oil, the Nitrogen oxide (NO_x) emissions shall not exceed the limitations specified below

NO_x: 132 ppmvd@ 3% oxygen, 0.176 lb/MMBTU, 11.05 pounds per hour and 34.09 tons per year on a twelve (12) month rolling sum.

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

Pursuant to 25 Pa. Code § 123.22(e)(2), the sulfur content in No. 2 fuel oil fired in this boiler shall not exceed 0.05 percent by weight.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

Beginning on January 31, 2016, the boiler shall be operated in compliance with all applicable requirements for "units designed to burn gas 1 fuel" as defined in 40 C.F.R. §63.7499(l).

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §139.16]
Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained for each fuel oil delivery made.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]

The permittee shall monitor daily, when in operation:

(a) the amount and type of fuel used,

(b) the hours of operation.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.512(h) and 129.93.]

Each adjustment conducted under the tune-up procedures for this boiler, shall be recorded in a form suitable and readily available for expeditious review and contain the following:

(a) The date of the tuning procedure.

(b) The name of the service company and technician.

(c) The final operating rate or load.

**SECTION D. Source Level Requirements**

(d) The final CO and NO_x emission rates.

(e) The final excess oxygen rate.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]

(a) The permittee shall keep daily records of:

- (1) the amount and type of fuel used,
- (2) the hours of operation.

(b) The permittee shall obtain and retain onsite fuel supplier certifications to demonstrate compliance with the sulfur limit. The certifications shall comply with 40 C.F.R. §60.48c(f)(1).

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

(a) The permittee shall submit applicable reports required under 40 C.F.R. §60.48c.

(b) The reporting period for the reports required under 40 C.F.R. Part 60 Subpart Dc is each six-month period. All reports shall be submitted to the Department and the USEPA and shall be postmarked by the 30th day following the end of the reporting period, as per 40 C.F.R. §40.48c(j).

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.512(h) and 129.93.]

After January 31, 2016, compliance with annual tune-up specified in 40 C.F.R. §63.7540(a)(10)(i) through (vi) deemed compliance with paragraphs (a) and (b) below:

(a) The permittee shall perform an annual tune-up on the combustion process for this boiler. The annual tune-up shall consist of, at a minimum, the following:

- (1) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- (2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and to the extent practicable, minimize the emissions of CO.
- (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

(b) The annual combustion tune-up shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-3401/1-83-023) or equivalent procedures approved by the Department in writing.

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

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The boiler shall apply flue gas re-circulation during the natural gas firing and low excess air during oil firing.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The boiler shall not be operated to exceed 46 MCF/hr of natural gas on a 12-month rolling average basis unless stack testing is performed at a higher rate and the results show compliance with the permitted emission limits.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

[Additional authority for this permit condition is also derived from 25 Pa. Code §§127.512(h) and 129.93, and 40 C.F.R. §§63.7500 and 63.7515(d).]

As per 40 C.F.R. §63.7540(a)(10), the permittee must conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified bellow.

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown);
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by DEP or EPA Administrator, an annual report containing the information in paragraphs (A) through (C) below.
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 050

Source Name: UNITS BURN GAS 1 SUBCATEGORY (<5 MMBTU/HR)

Source Capacity/Throughput:

I. RESTRICTIONS.**Fuel Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7499]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What are the subcategories of boilers and process heaters?**

The process heaters covered under Source ID 050 burn only natural gas, and are in the subcategory of units designed to burn gas 1 fuels, as defined in 40 C.F.R. §63.7575.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What records must I keep?**

The permittee must keep records of a copy of each notification and report submitted to comply with 40 C.F.R. 63 subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7560]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****In what form and how long must I keep my records?**

The permittee shall, according to 40 C.F.R. §63.10(b),

(a) Keep the records in a form suitable and readily available for expeditious review.

(b) Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) Keep each record on site, or the records must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records can be kept off site for the remaining 3 years.

V. REPORTING REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

(a) The permittee must submit each report in Table 9 to 40 C.F.R. 63 Subpart DDDDD that applies.

(b) The permittee must submit a 5-year compliance report as specified below:

**SECTION D. Source Level Requirements**

- (1) The first compliance report must cover the period beginning on the compliance date that is January 31, 2016 and ending on January 31, 2021. The first 5-year compliance report must be postmarked or submitted no later than January 31, 2021.
- (2) Each subsequent 5-year compliance reports must cover the 5-year periods from January 1 to December 31. Each subsequent 5-year compliance reports must be submitted in accordance with provisions for annual certificate of compliance reports in Section C of this Operating Permit when due in years following report coverage periods, as per 40 C.F.R. §63.10(a)(5).
- (c) A compliance report must contain the information in 40 C.F.R. §63.7550(c)(5)(i) through (iv) and (xiv):
- (i) Company and Facility name and address.
 - (ii) Unit information.
 - (iii) Date of report and beginning and ending dates of the reporting period.
 - (iv) The total operating time during the reporting period.
- (xiv) Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.
- (d) As per 40 C.F.R. §63.7550(h)(3), the permittee must submit all reports electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator.

VI. WORK PRACTICE REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]**

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

What emission limits, work practice standards, and operating limits must I meet?

[Additional authority of this permit condition is also derived from 25 Pa. Code §129.97(c)(3).]

As per 40 C.F.R. §63.7500(a), the permittee must operate and maintain the process heaters, at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

When must I conduct subsequent performance tests or fuel analyses, or tune-ups?

As per 40 C.F.R. §63.7515(d), the permittee must conduct a 5-year performance tune-up according to 40 C.F.R. §63.7540(a)(12). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

As per 40 C.F.R. §§63.7500, 63.7505(a), 63.7515(d), and 63.7540(a)(12), the permittee must conduct a tune-up of the unit every 5 years as specified in paragraphs (i) through (vi) below to demonstrate continuous compliance.

- (i) Inspect the burner, and clean or replace any components of the burner as necessary. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but the burners must be inspected at least once every 72 months;

**SECTION D. Source Level Requirements**

- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by DEP, a report containing the information in paragraphs (A) and (B) below:
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up.

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

Units covered under Source ID 050 are:

Grieve Oven Process Heater - 0.5 MMBtu/hr

***** Permit Shield in Effect. *****

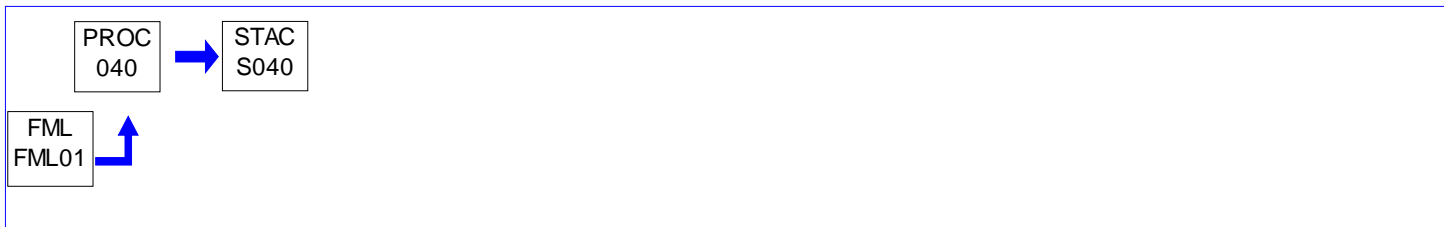
**SECTION D. Source Level Requirements**

Source ID: 040

Source Name: EXISTING EMERGENCY SI RICE (<=500HP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 6

**I. RESTRICTIONS.****Operation Hours Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

The emergency stationary RICE must be operated in accordance with the applicable requirements specified in 40 CFR §63.6640(f).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

As per 40 C.F.R. §63.6625(f), the engine must be equipped with a non-resettable hour meter.

IV. RECORDKEEPING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

(a) As per 40 C.F.R. §63.6655(e), the permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE were operated and maintained according to permittee's own maintenance plan.

(b) As per 40 C.F.R. §63.6655(f), the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****In what form and how long must I keep my records?**

(a) The records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).

(b) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date

**SECTION D. Source Level Requirements**

of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1).

V. REPORTING REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

As per 40 C.F.R. §63.6640(e), the permittee must report each instance in which the requirements in Table 8 to 40 C.F.R. 63 subpart ZZZZ that apply were not meet.

VI. WORK PRACTICE REQUIREMENTS.**# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6602]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

As per 40 C.F.R. §§63.6602 and 63.6640(a), the permittee must comply with the following requirements as specified in Item 6 of Table 2c to 40 C.F.R. 63 subpart ZZZZ:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my general requirements for complying with this subpart?**

- (a) The permittee must be in compliance with other requirements that apply at all times.
- (b) At all times the permittee must operate and maintain the source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEP which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

- (a) As per 40 C.F.R. §§63.6625(e) and 63.6640(a), the permittee must operate and maintain each stationary RICE according to the manufacturer's emission-related written instructions or develop permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- (b) As per 40 C.F.R. §§63.6625(h) and 63.6640(a), the permittee must minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

Source ID 040 covers the following listed existing emergency spark ignition stationary RICE with a site rating of less than or equal to 500 brake HP, and commenced construction before June 12, 2006:

Engine ID	Manufacturer	Fuel	HP	Date Installed
4	Onan	NG	47	2003
5	Onan	NG	101	1962
6	Onan	NG	107	2001
7	Onan	NG	201	2003

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of the General Provisions apply to me?**

The permittee must comply with the General Provisions requirements listed in 40 C.F.R. §§63.1 through 63.15 that apply.

***** Permit Shield in Effect. *****

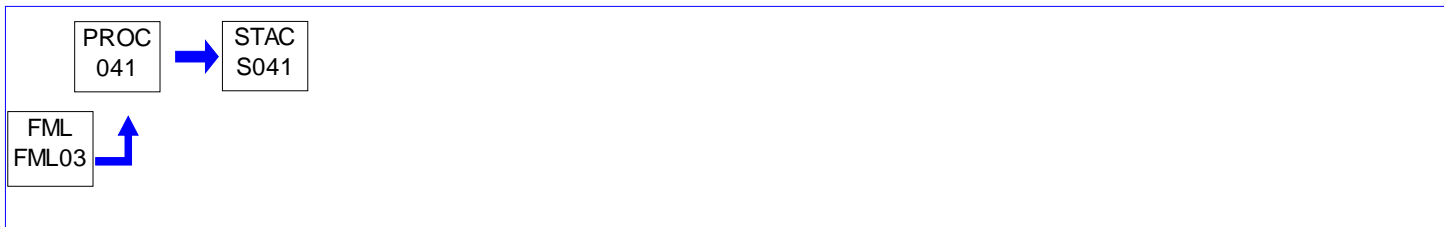
**SECTION D. Source Level Requirements**

Source ID: 041

Source Name: EXISTING EMERGENCY CI RICE (<=500HP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 6

**I. RESTRICTIONS.****Operation Hours Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

The emergency stationary RICE must be operated in accordance with the applicable requirements specified in 40 CFR §63.6640(f).

II. TESTING REQUIREMENTS.**# 002 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the maximum percent sulfur in the fuel, is obtained each time a fuel oil delivery is made.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

As per 40 C.F.R. §63.6625(i), the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c to 40 C.F.R. 63 subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to 40 C.F.R. 63 subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

As per 40 C.F.R. §63.6625(f), the permittee must install a non-resettable hour meter if one is not already installed.

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

(a) The permittee may obtain from the fuel oil supplier, a delivery receipt that certifies the percentage of sulfur, by weight, each time a delivery is made.

(b) In the event that a delivery is made, and no receipt is obtained, the permittee shall perform testing in accordance with 25 Pa. Code §139.16.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

As per 40 C.F.R. §63.6625(i), if utilizing oil analysis program in order to extend the oil change requirements, the permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

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

(a) As per 40 C.F.R. §63.6655(e), the permittee must keep records of the maintenance conducted on the stationary RICE to demonstrate that the stationary RICE was operated and maintained according to the permittee's maintenance plan.

(b) As per 40 C.F.R. §63.6655(f), the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****In what form and how long must I keep my records?**

(a) The records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).

(b) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1).

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

As per 40 C.F.R. §63.6640(e), the permittee must also report each instance in which the applicable requirements in Table 8 to 40 C.F.R. 63 subpart ZZZZ were not met.

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6602]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

(a) As per 40 C.F.R. §§63.6602 and 63.6640(a) and (e), the permittee must comply with the following requirements specified in Item 1 of Table 2c to 40 C.F.R. 63 Subpart ZZZZ:

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first.
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(b) During start up, the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

What are my general requirements for complying with this subpart?

(a) The permittee must be in compliance with the applicable requirements in this subpart at all times.

(b) At all times, the permittee must operate and maintain the source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEP which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

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

(a) As per 40 C.F.R. §63.6625(e), the permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(b) As per 40 C.F.R. §63.6625(h), the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

VII. ADDITIONAL REQUIREMENTS.**# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

What parts of my plant does this subpart cover?

Source ID 041 covers the following listed existing emergency compression ignition stationary RICE with a site rating of less than or equal to 500 brake HP, and commenced construction before June 12, 2006:

Engine ID	Manufacturer	Fuel	HP	Date Installed
1	GMC/O'Brien	Diesel	268	1969
2	Katolight	Diesel	335	2004

**SECTION D. Source Level Requirements**

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]

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

What parts of the General Provisions apply to me?

The permittee must comply with the General Provisions requirements listed in Table 8 to 40 C.F.R. 63 Subpart ZZZZ that apply.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 042

Source Name: EXISTING EMERGENCY CI RICE (>500HP)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 6

I. RESTRICTIONS.**Operation Hours Restriction(s).****# 001 [25 Pa. Code §129.97]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.**

The use of the emergency stationary RICE is limited to less than 500 hours in a 12-month rolling period.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 63.6640(f).

(b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 63.6640(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

II. TESTING REQUIREMENTS.

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

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

The engine shall be equipped with a non-resettable hour meter that monitors and indicates the total operating hours.

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

(a) The permittee may obtain from the fuel oil supplier, a delivery receipt that certifies the percentage of sulfur, by weight, each time a delivery is made.

(b) In the event that a delivery is made, and no receipt is obtained, the permittee shall perform testing in accordance with 25 Pa. Code §139.16.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 005 [25 Pa. Code §129.97]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices for the control of the VOC emissions.

**SECTION D. Source Level Requirements****# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my general requirements for complying with this subpart?**

(a) The permittee must be in compliance with requirements in 40 C.F.R. 63 subpart ZZZZ that apply at all times.

(b) At all times the permittee must operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEP which may include, but is not limited to review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

VII. ADDITIONAL REQUIREMENTS.**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

Source ID 042 covers the following listed existing emergency compression ignition stationary RICE with a site rating of more than 500 brake horsepower (HP), and commenced construction before December 19, 2002:

Engine ID	Manufacturer	Fuel	HP	Date Installed
3	Caterpillar	Diesel	671	2002

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 044 Source Name: NEW EMERGENCY SI ICE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 6

I. RESTRICTIONS.**Operation Hours Restriction(s).****# 001 [25 Pa. Code §129.93]****Presumptive RACT emission limitations**

As per 25 Pa. Code §129.93(c)(5), the engine shall be operated less than 500 hours in a consecutive 12-month period.

II. TESTING REQUIREMENTS.

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

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

Each engine shall be equipped with a non-resettable hour meter that monitors and indicates the total operating hours.

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

The permittee shall keep the following records each time the engine is operated:

- (a) Date of the operation
- (b) Hours spent
- (c) Reason of the operation

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

(a) Source ID 044 covers the following listed new emergency spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP:

Engine No.	Manufacturer	Fuel	HP	Date Installed
8	Cummins	NG	201	2007

(b) As per 40 C.F.R. §63.6590(c)(6), the engine(s) must meet the requirements of 40 C.F.R. 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. part 60 subpart JJJJ, however, there are no applicable requirements for this engine in 40 C.F.R.

**SECTION D. Source Level Requirements**

60 Subpart JJJJ.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: TANTALUM RECYCLE DIGESTION (B-87)

Source Capacity/Throughput:

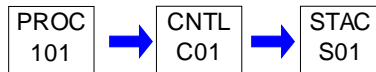
N/A

TANTALUM

Conditions for this source occur in the following groups: 10

5

8

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Hydrogen Fluoride (HF) emissions from the scrubber shall not exceed 0.2 pounds per hour, and 0.9 tons per year in a twelve (12) month rolling sum.

(b) The Hydrogen Fluoride (HF) concentration in the scrubber recycle water shall not exceed 7 grams per liter.

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The pressure drop across the scrubber associated with Building 87 shall be maintained at a minimum of two (2) inches w.g.

(b) The recycle water flow rate to the scrubber shall be maintained at a minimum of 65 gallons per minute.

(c) The fresh make-up water flow rate to the scrubber shall be maintained at a minimum of 3.5 gallons per minute.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall analyze the HF concentration of the recycle water to the scrubber once per day when the process is operating.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep the following records, when the process is operating:

(a) HF concentration in the scrubber recycle water, daily.

**SECTION D. Source Level Requirements**

(b) HF emissions monthly and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(1) The following sources shall be operated in association with the scrubber

- a) waste tank
- b) digesters
- c) filter press.

(2) The associated sources/production activities shall be shutdown during air pollution control (APC) unit maintenance or utilities maintenance activities that effect the APC unit function.

(3) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit malfunctions and utilities maintenance activities that effect the APC unit function.

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Source 101, Building 87, primarily consists of:

- (a) Waste Tank
- (b) Digestors
- (c) Filter press
- (d) Related Material Handling Systems

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 102

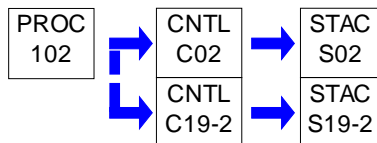
Source Name: TANTALUM SALTS PROCESS (B-19)

Source Capacity/Throughput:

N/A

TANTALUM

Conditions for this source occur in the following groups: 4
9

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

No person may permit the emission into the outdoor atmosphere of particulate matter from the dust collector(s) at any time, in excess of 0.04 grains per dry standard cubic foot, pursuant to 25 Pa. Code § 123.13(c)(1)(i)

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 25 Pa. Code §129.99(c).]

- The Hydrogen Fluoride (HF) emissions from the scrubber shall not exceed 0.73 pounds per hour and 3.2 tons per year on a twelve (12) month rolling sum
- The Hydrogen Chloride (HCl) emissions shall not exceed 0.15 pounds per hour and 0.67 tons per year on a twelve (12) month rolling sum.

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

The Particulate Matter (PM) emissions from the dust collector shall not exceed 0.02 grains per dry standard cubic foot, 0.43 pounds per hour and 1.9 tons per year on a twelve (12) month rolling sum.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 25 Pa. Code §129.99(c).]

- The permittee may operate the heating tanks concurrently.
- The number of batches per tank shall not exceed 364 batches per month.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- The pressure drop across the scrubber associated with Building 19 shall be maintained between 2 inches w.g. to 5 inches w.g.
- The pressure drop across the dust collector shall be maintained between 0.5 inches w.g. to 4 inches w.g.
- The make-up flow rate of the scrubber shall be maintained at a minimum of three (3) gallon per minute.

**SECTION D. Source Level Requirements**

d. The recycle water flow rate to the scrubber shall be maintained at a minimum of 105 gallons per minute.

II. TESTING REQUIREMENTS.

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

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

The permittee shall calculate monthly

- (a) The HF and HCl emissions using source specific emission factors
- (b) The PM emissions using the emission factors determined from the most recent stack test.

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

The permittee shall monitor, when the process is operating:

- a. The number of batches per tank monthly, and
- b. The pressure drop across the dust collector.

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

The permittee shall keep records of PM, HF, and HCl emissions on monthly and 12-month rolling sum.

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

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

The permittee shall keep records of:

- a. The number of batches per tank, monthly
- b. The pressure drop across the dust collector, daily when the process is operating.

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The following sources shall be operated in association with the acid gas scrubber.

- i. Heating tanks
- ii. Primary crystallizers
- iii. Secondary recovery crystallizers
- iv. HF storage system

(b) The associated sources/production activities shall be shut during APC unit maintenance or utilities maintenance activities that effect the APC unit function.

(c) The associated sources/production activities shall be shut in a reasonable amount of time during APC unit malfunctions and utility outages that affect the APC unit function.

(d) The scrubber control efficiency for HF and HCl shall be equal to or greater than 90% on a 24 hour basis.

(e) The following sources shall be operated in association with the dust collector

- i. GEMCO dryer
- ii. Pannevis dryer
- iii. Drum loader
- iv. IBC loader

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

The Source 102, Building 19, primarily consists of:

- (a) Heating tanks,
- (b) Crystallizers,
- (c) Dryers,
- (d) Acid storage tanks,
- (e) Acid waste storage tank,
- (f) Related material handling equipments.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

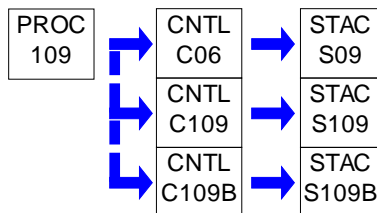
Source ID: 109

Source Name: TA ACID LEACHING/DRYING (B-47/101)

Source Capacity/Throughput:

N/A

TANTALUM POWDER

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The Hydrogen Fluoride (HF) emissions from the scrubber shall not exceed 0.07 pounds per hour (based on an eight-hour average), and 0.31 tons per year on a twelve (12) month rolling sum. In Addition, the Hydrogen Sulfide (H₂S) emissions from the scrubber shall not exceed 0.17 tons per year on a twelve (12) month rolling sum when producing Cap Grade material.

(b) The Particulate Matter (PM) emissions from the wet dust collector (Source C109B) shall not exceed 0.02 grains per dry standard cubic foot, and 0.3 tons per year on a twelve (12) month rolling sum. Compliance with this condition ensures compliance with 25 Pa. Code § 123.13.

(c) The Hydrogen Chloride (HCl) emissions from the scrubber shall not exceed 0.15 pounds per hour (based on an eight-hour average), and 0.7 tons per year on a twelve (12) month rolling sum.

(d) The Nitrogen Oxides (NO_x) emissions from the scrubber shall not exceed 1.9.pounds per hour (based on an eight-hour average) and 8.3 tons per year on a twelve (12) rolling sum.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.512]

(a) The high capacitance powder production shall not exceed 500,000 pounds per year in a twelve (12) month rolling sum.

(b) The total combined powder production shall not exceed 1 million pounds per year in a twelve (12) month rolling sum.

(c) The start of each individual Cap Grade Acid Water Wash batch shall occur no less than 120 minutes following the start of any other individual Cap Grade Acid Water Wash batch. For purposes of this condition, Cap Grade Acid Water Wash means only the tantalum acid leaching process option for acid leaching cap grade powder in water wash tanks.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) Requirements for the packed tower scrubber (Source ID C06)

**SECTION D. Source Level Requirements**

- (1) The hydrogen fluoride (HF) and hydrochloric acid (HCl) emissions shall be controlled by the scrubber.
- (2) The scrubber shall be operated to achieve a minimum removal efficiency of 90 percent.
- (3) The pressure drop across the packed tower shall be maintained at a minimum of two (2) inches w.g.
- (4) The recycle water flow rate to the scrubber shall be maintained at a minimum of 115 gallons per minute.
- (5) The blowdown flow rate of the scrubber shall be maintained at a minimum of one (1) gallon per minute.

(b) Requirements for the RotoClone wet dust collector (Source ID C109B)

- (1) Particulate Matter (PM) emissions from the blenders/screeners shall be controlled by the wet dust collector.
- (2) The wet dust collector shall be operated to achieve PM emissions not to exceed 0.02 grains per dry standard cubic foot.
- (3) The pressure drop between the inlet and outlet of the wet dust collector shall be maintained at a minimum of 3.0 inches w.g. and not to exceed a maximum of 7.0 inches w.g.
- (4) The water level shall be maintained at the overflow weir in the control box.

(c) Requirements for the vapor recovery unit (VRU) (Source ID C109)

- (1) The vapor temperature at the VRU outlet shall not exceed 5 degrees Fahrenheit at all times when any of the Attritor mills are operating.
- (2) The VRU shall not be bypassed at any time when any of the Attritor mills are operating.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The permittee shall monitor the following parameters of the packed tower scrubber (Source ID C06) when the process is in operation, once per day:
 - (1) the pressure drop across the scrubber;
 - (2) the recycle water flowrate to the scrubber;
 - (3) the scrubber blowdown flowrate.
- (b) The permittee shall monitor the following once per shift for the wet dust collector (Source ID C109B), when the source is in operation,
 - (1) the pressure drop between the inlet and outlet of the dust collector;
 - (2) the water level in the control box of the dust collector.
- (c) The permittee shall monitor the vapor temperature daily at the VRU (Source ID C109) outlet when the VRU is operating.
- (d) The permittee shall maintain sufficient data or information required to determine compliance with
 - (1) the various (VOC, HF, PM, HCL, NOx) emissions limit;
 - (2) the high capacitance powder production limit;
 - (3) the total combined powder production.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.512]

(a) The permittee shall keep records of any data or information necessary, as well as any calculations used, to determine compliance with

- (1) the HF, PM, HCl, NO_x emissions limitations;
- (2) the high capacitance powder production limit; and
- (3) the total combined powder production limit.

(b) The permittee shall keep records of :

- (1) dates of any inspections and maintenance performed to the sources and/or air cleaning devices;
- (2) any deficiencies/malfunctions and corrective actions taken with the sources and/or air cleaning devices.

(c) The permittee shall keep daily records of the following, when the process is in operation:

- (1) the pressure drop across the scrubber;
- (2) the recycle water flowrate to the scrubber;
- (3) the scrubber blowdown flowrate.

(d) The permittee shall keep daily records of the following, when the process is in operation:

- (1) the pressure drop across the wet dust collector;
- (2) the water level at the overflow weir in the control box.

(e) The permittee shall keep daily records of VRU outlet temperature.

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

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

The permittee shall keep records of:

- a. the start date, start time by hour and minutes, and individual wash tank identification for each Cap Grade Acid Water Wash batch.
- b. Hydrogen sulfide emissions on a 12 month rolling sum.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 25 Pa.

**SECTION D. Source Level Requirements**

Code §129.99(c.)

(a) The following sources shall be operated in association with the scrubber (Source ID C06). The scrubber shall not be bypassed during process operations.

- (1) acid barrels;
- (2) furnaces;
- (3) vacuum pumps (4VS047) associated with vacuum dryers;
- (4) Vacuum pump (1VS047).

(b) The following sources shall be operated in association with the wet dust collector (Source ID C109B)

- (1) blenders;
- (2) screeners.

(c) The attritor milling process shall be operated in association with the VRU (Source ID C109).

(d) The sources shall be shutdown when the air pollution control (APC) units are not operating.

(e) The sources and APC units shall be operated and maintained in accordance with manufacturers' specifications and good air pollution control practices.

(f) The permittee shall conduct visual inspections, including, but not limited to, spills and leakage for the sources identified in this building.

VII. ADDITIONAL REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The Source 109, Building 47/101, primarily consists of :

- (1) Acid barrels
- (2) Dryers
- (3) Furnaces
- (4) Screeners and blenders
- (5) Attritor Mills
- (6) Misc. Filling and Filtering equipments.

(b) The following sources are also located in Building 47/101

- (1) vacuum dryer (RFD# 46-A01-1954)
- (2) acid barrels (RFD# 46-A01-2078)

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 111

Source Name: WIRE CLEANING PROCESS (B-58)

Source Capacity/Throughput:

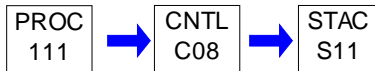
N/A

TANTALUM METAL

N/A

Natural Gas

Conditions for this source occur in the following groups: 5

**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The pressure drop across the scrubber shall be limited to a minimum of 2 inches w.g. at any time.
- (b) The pH of the scrubber recycle water shall be limited to a minimum of 8.0

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

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

- (1) the pH of the scrubber recycle water
- (2) the pressure drop across the scrubber
- (3) visual inspections including, but not limited to, spills and leakage for the sources identified in this building.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The permittee shall record the following daily, when the process is in operation:

- (1) the pH of the scrubber
- (2) the pressure drop across the scrubber
- (3) daily visual inspection results.

(b) The permittee shall keep records of the following:

**SECTION D. Source Level Requirements**

- (1) the dates of the inspection and maintenance performed
- (2) any deficiencies/malfunctions and the corrective action taken

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- (1) The following sources shall be operated in association with the scrubber
 - (a) dip tanks
 - (b) acid storage tanks
- (2) The associated sources/production activities shall be shutdown during APC unit maintenance or utilities maintenance activities on plant utilities that effects the APC unit function.
- (3) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit malfunctions and utility outages that effect the APC unit function.

VII. ADDITIONAL REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Source 111, Building 58, primarily consists of:

- (a) Tanks
- (b) oven

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

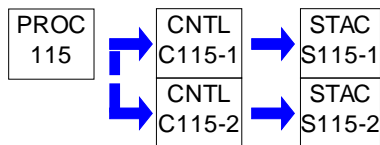
Source ID: 115

Source Name: POWDER PACKAGING & MILLING OPERATIONS

Source Capacity/Throughput:

N/A

TANTALUM

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Particulate matter (PM) emissions from each wet dust collector shall not exceed 0.02 grains per dry standard cubic foot.

(b) The combined PM emissions from Building 115 sources shall not exceed 1.84 tons per year. The emissions shall be calculated using the emission factors from the most recent compliance stack test results.

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each wet dust collector shall be operated to achieve a PM removal efficiency of 99 percent by weight, dry basis.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Each wet dust collector shall be equipped with a differential manometer to measure the pressure drop between the inlet gases and outlet gases.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a. The permittee shall record and keep records of the pressure drop between the inlet gases and outlet gases of the wet dust collectors on a daily basis when the process is operating.

b. The permittee shall keep records of:

i. Date of any inspections and maintenance performed on the sources and control devices.

ii. The permittee shall keep records of the emission factors used to calculate emissions.

V. REPORTING REQUIREMENTS.

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

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

- (a) The sources and air pollution control devices listed in this permit shall be operated and maintained in a manner consistent with good operating and maintenance practices.
- (b) The pressure drop across the AAF rotoclone wet dust collector (Source ID C115-1) shall be maintained between 2.0 to 5.5 inches w.g.
- (c) The pressure drop across the TriMer wet dust collector (Source ID C115-2) shall be maintained between 7.5 to 11 inches w.g.
- (d) The associated sources/production activities shall be shutdown during APC unit maintenance or utilities maintenance activities on plant utilities that effects the APC unit function.
- (e) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit malfunctions and utility outages that effect the APC unit function.

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

1. The AAF rotoclone wet dust collector controls PM emissions from the packaging unit and jaw crushers.
2. The TriMer wet dust collector controls PM emissions from the Vortec mills and Impact mill.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 123

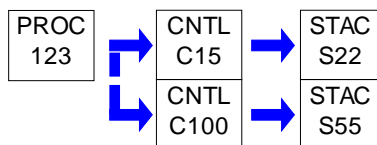
Source Name: ORE DIGESTION (B-73)

Source Capacity/Throughput:

N/A

T/ACB OXIDE

Conditions for this source occur in the following groups: 10
8

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

No person may permit the emission into the outdoor atmosphere of particulate matter from The dust collector(s) at any time, in excess of 0.04 grains per dry standard cubic foot per minute, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

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

The Hydrogen Fluoride (HF) emissions from the scrubber exhaust shall not exceed 0.17 pounds per hour and 0.7 tons per year on a twelve (12) month rolling sum.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

- (a) The pressure drop across the scrubber shall be limited to a minimum of 2.5 inches w.g.
- (b) The make-up flow rate of the scrubber shall be maintained at a minimum of 3.5 gallons per minute.
- (c) The recycle water flow rate to the scrubber shall be maintained at a minimum of 360 gallons per minute.

II. TESTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.511]

The permittee shall maintain sufficient data or information to demonstrate compliance with the Hydrogen Fluoride (HF) emission limit.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.511]

The permittee shall keep records of any data or information required, as well as any calculations used to determine compliance with the Hydrogen Fluoride (HF) emission limits.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code Section 127.512(h).]

(1) The permittee shall operate the following sources in association with the water scrubber and cannot bypass the scrubber when operating:

- (a) Digesters
- (b) Filter Press
- (c) Waste tanks
- (d) HF Storage Systems

(2) The associated sources/production activities shall be shutdown during APC unit maintenance or utilities maintenance activities on plant utilities that effects the APC unit function.

(3) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit malfunctions and utility outages that effect the APC unit function.

(4) The dust collector(s) shall be operated and maintained in accordance with manufacturer's specifications to ensure compliance with the Particulate Matter emission limit.

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

The Source 123, Building 73, primarily consists of:

- (a) Tanks
- (b) Digesters
- (c) Filter presses
- (d) Hoppers
- (e) Ball Mills

**SECTION D. Source Level Requirements**

(f) Waste tanks

(g) HF Storage Systems

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 124

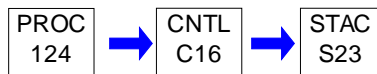
Source Name: EXTRACTION PROCESS (B-74)

Source Capacity/Throughput:

N/A

TANT/COL.SOLNS

Conditions for this source occur in the following groups: 4
9

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

The Hydrogen Fluoride (HF) emissions from the scrubber shall not exceed 0.2 pounds per hour and 0.9 tons per year on a twelve (12) month rolling basis.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The pressure drop across the scrubber associated with Building 74 shall be maintained between 1.6 inches w.g. to 6 inches w.g.

(b) The make-up flow rate of the scrubber shall be maintained at a minimum of one (1) gallon per minute.

(c) The recycle water flow rate to the scrubber shall be maintained at a minimum of 100 gallons per minute

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §129.99(c).]

(a) The Methyl Isobutyl Ketone (MIBK) recovery unit shall be operated at an overall annual recovery efficiency of at least 75 percent, by weight, exclusive of downtime for required maintenance.

(b) The maintenance downtime shall not exceed 250 hours on a twelve (12) month rolling period.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor the following to calculate the MIBK emissions

(a) MIBK contents in the influent and effluent of the flash unit based on a grab sample collected at a minimum of once per calendar quarter, ending with the last day of March, June, September and December.

(b) The flow rates of the flash unit influent and effluent using a rotometer, or equivalent, at the beginning of each week.

**SECTION D. Source Level Requirements**

(c) MIBK content in the influent and effluent of the stripper based on a grab sample collected at a minimum of once per calendar quarter, ending with the last day of March, June, September and December.

(d) The flow rates of the stripper influent and effluent using a rotometer, or equivalent, at the beginning of each week.

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

The permittee shall keep records of the following to calculate the MIBK emissions

- (a) MIBK contents in the influent and effluent of the flash unit
- (b) The flow rates of the flash unit influent and effluent
- (c) MIBK content in the influent and effluent of the stripper
- (d) The flow rates of the stripper influent and effluent

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

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

The permittee shall keep records of the dates and hours of the maintenance downtime of the MIBK recovery system.

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The following sources shall be operated in association with the existing acid gas scrubber. The scrubber shall not be bypassed at anytime during the production activities:

- (1) Feed Tanks
- (2) Storage Tanks
- (3) Intermediate Storage Tank
- (4) Transfer Tanks

(b) The associated sources/production activities shall be shutdown during APC unit maintenance or utilities maintenance activities on plant utilities that effects the APC unit function.

(c) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit malfunctions and utility outages that effect the APC unit function.

**SECTION D. Source Level Requirements**

(d) The scrubber control efficiency for Hydrogen Fluoride (HF) shall be equal to or greater than 90 percent on a 24-hour basis.

VII. ADDITIONAL REQUIREMENTS.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Source 124, Building 74, primarily consists of:

- (a) Any combination of equipment for Tantalum Line Nos. 1, 2, 3, and 4, and Tantalum/Niobium line Nos. 5 and 6
- (b) Atlas Boxes
- (c) MIBK transfer tank
- (d) Raffinate Acidification Tanks
- (e) Feed tanks
- (f) Raffinate Storage Tanks
- (g) Fraction Storage Tank, and
- (h) Other ancillary and support equipment or similar equipment

***** Permit Shield in Effect. *****

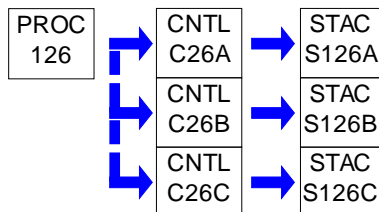
**SECTION D. Source Level Requirements**

Source ID: 126

Source Name: SODIUM REDUCTION PROCESS (B-49)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 5

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

The Particulate Matter (PM) emissions from the dry dust collector shall not exceed 0.02 gr./dscf, 0.13 lb/hr, and 0.17 tons per year on a twelve (12) month rolling sum.

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

(a) The Particulate Matter (PM) emissions from the scrubber shall not exceed 0.02 gr./dscf, 0.07 lb/hr, and 0.4 tons per year on a twelve month rolling sum.

(b) The Hydrogen Flouride (HF) emissions from the scrubber shall not exceed 0.001 lb/hr, and 0.003 tons per year on a twelve month rolling sum.

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

(a) The Particulate Matter (PM) emissions from the mist eliminator shall not exceed 0.02 gr./dscf, 0.58 lb/hr, and 0.95 tons per year on a twelve month rolling sum.

(b) The Hydrogen Flouride (HF) emissions from the mist eliminator shall not exceed 0.046 lb/hr, and 0.077 tons per year on a twelve month rolling sum.

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

The sodium reduction process shall not exceed an average of 32 batches per day on a twelve (12) month rolling sum.

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

A. DRY DUST COLLECTOR

**SECTION D. Source Level Requirements**

The pressure drop across the dry dust collector shall be maintained at a minimum of 0.5 inch w.g.

B. SCRUBBER

- (1) The pressure drop across the scrubber packing shall be maintained at a minimum of 2 inches w.g.
- (2) The recycle water flow rate shall be maintained at a minimum of 155 gallons per minute
- (3) The blow down flow rate to the scrubber shall be maintained at a minimum of 0.5 gallons per minute

C. MIST ELIMINATOR

- (1) The pressure drop across the mist eliminator shall be maintained at a minimum of 4 inches w.g.
- (2) The water flow rate to the mist eliminator shall be maintained at a minimum of 1 gallon per minute.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor, once per day, when the process is operating:

- (a) the pressure drop across the dry dust collector
- (b) the recycle water flow rate to the scrubber packing
- (c) the pressure drop across the scrubber packing
- (d) the scrubber water blow down flow rate
- (e) the pressure drop across the mist eliminator
- (f) the water flow rate to the mist eliminator.

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

The permittee shall maintain sufficient data or information required to determine compliance with:

- (a) the various (PM, HF) emission limitations for the respective devices
- (b) the batches of sodium reduction per day.

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

The permittee shall keep daily records, when the process is operating, of:

**SECTION D. Source Level Requirements**

- (a) the pressure drop across the dry dust collector
- (b) the recycle water flow rate to the scrubber packing
- (c) the pressure drop across the scrubber packing
- (d) the scrubber water blow down flow rate
- (e) the pressure drop across the mist eliminator
- (f) the water flow rate to the mist eliminator.

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

The permittee shall keep records sufficient data or information required, as well as calculations used to determine compliance with:

- (a) the various (PM, HF) emission limitations for the respective devices
- (b) the batches of sodium reduction per day.

V. REPORTING REQUIREMENTS.

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

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

- (a) The following sources shall be operating in conjunction with the dry dust collector
 - (1) material loading and weighing stations
 - (2) material loading of dryers
- (b) The following sources shall be operating in conjunction with the packed scrubber
 - (1) furnaces
 - (2) dryers
- (c) The following sources shall be operating in conjunction with the mist eliminator
 - (1) water down rooms
 - (2) crushers
 - (3) clean room
- (d) The associated sources/production activities shall be shutdown during APC unit maintenance or utilities maintenance activities on plant utilities that effects the APC unit function.
- (e) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit

**SECTION D. Source Level Requirements**

malfunctions and utility outages that effect the APC unit function.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

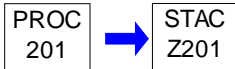
**SECTION D. Source Level Requirements**

Source ID: 201

Source Name: WASTEWATER TREATMENT PLANT

Source Capacity/Throughput: 5,833.000 Gal/HR WASTE WATER

Conditions for this source occur in the following groups: 9

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall provide to the DEP, upon request, copies of records required by the NPDES Permit.

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

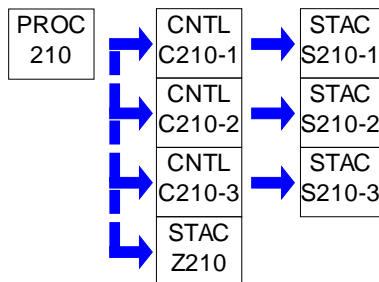
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 210

Source Name: RAFFINATE SOLIDIFICATION PROCESS

Source Capacity/Throughput: 417.000 Gal/HR RAFFINATE

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

- a. HF emissions from the surge tank scrubber stack (S210-1) shall not exceed 0.002 pounds per hour.
- b. PM emissions from the mix tank scrubber stack (S210-2) shall not exceed 0.02 pounds per hour.
- c. HF emissions from the mix tank scrubber stack (S210-2) shall not exceed 0.042 pounds per hour.
- d. HF emissions from the process shall not exceed 0.2 tons per year in a 12-month rolling sum.
- e. PM emissions from each silo or bin shall not exceed 0.02 grains per dry standard cubic foot.

002 [25 Pa. Code §129.97]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.**

The VOC emissions from this source shall be limited to less than 2.7 tons per year.

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

Each scrubber shall achieve a minimum 90 percent HF removal efficiency or meet the HF emission limits specified above, whichever is less stringent.

II. TESTING REQUIREMENTS.

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

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

- a. The packed bed scrubber shall be equipped with a differential manometer or equivalent to measure the pressure drop across the packed bed.
- b. The packed bed scrubber shall be equipped with a rotameter or equivalent to measure the recycle water flow rate.
- c. The packed bed scrubber shall be equipped with a rotameter or equivalent to measure the make-up water flow rate.

**SECTION D. Source Level Requirements**

- d. The Venturi eductor shall be equipped with a pressure gage or equivalent to measure supply pressure at the injector.
- e. The Venturi eductor shall be equipped with a rotameter or equivalent to measure the recycle water flow rate.
- f. The Venturi eductor shall be equipped with a rotameter or equivalent to measure the blow-down water flow rate.

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

- a. The permittee shall keep the following records for the raffinate surge tank packed bed scrubber (Source ID C210-1) on a daily basis:
 - i. The pressure drop across the scrubber on a daily basis.
 - ii. The recycle water flow rate to the scrubber on a daily basis.
 - iii. The makeup water flow rate to the scrubber.
- b. The permittee shall keep the following records for the mix tank Venturi eductor scrubber (Source ID C210-2) on a daily basis:
 - i. The pressure drop across the scrubber.
 - ii. The recycle water flow rate to the scrubber.
 - iii. The blowdown water flow rate from the scrubber.
- c. The permittee shall keep the process emissions records on a monthly basis and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

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

- a. The permittee shall ensure that the sources and the air cleaning devices listed are operated and maintained in a manner consistent with good operating and maintenance practices.
- b. The silo and day bins shall be exhausted to the fabric filter during material transfer.
- c. During process operating periods, the permittee shall maintain the following operating parameters for the raffinate surge tank scrubber (Packed Bed; Source ID C210-1):
 - i. The pressure drop across scrubber between 0.2 and 2.0 inches, w.g.
 - ii. The recycle water flow rate to the raffinate surge tank scrubber at a minimum of 3 gallons per minute (gpm).
 - iii. The make-up water flow rate to the scrubber at a minimum of 0.5 gpm.
- d. During process operating periods, the permittee shall maintain the following for the mix tank scrubber (Venturi Eductor; Source ID C210-2):

**SECTION D. Source Level Requirements**

- i. The recycle water flow rate to scrubber at a minimum of 60 gpm.
 - ii. The pressure drop across the scrubber at a minimum of 2 inches, w.g.
 - iii. The blow-down water flow rate to the scrubber at a minimum of 1 gpm.
- e. The associated sources/production activities shall be shut down during air pollution control (APC) device maintenance and/or utilities maintenance activities that effect the APC device function.
- f. The associated sources/production activities shall be shut down in a reasonable amount of time during APC device malfunctions and utility outages that effect the APC device function.

007 [25 Pa. Code §129.97]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices for the control of the VOC emissions.

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

The raffinate solidification process, Source ID: 210, consists of:

- a. Raffinate surge tank controlled by a packed bed scrubber (Source ID: C210-1).
- b. Two mix tanks controlled by a venturi eductor scrubber (Source ID: C210-2).
- c. One blender.
- d. One lime silo, one SAP blender day bin, one mix tank day bin, and one lime blender day bin controlled by a fabric filter (Source ID: C210-3).
- e. Two filter cake storage bays.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

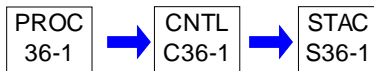
Source ID: 36-1

Source Name: BLDG. 36/101

Source Capacity/Throughput:

N/A

TANTALUM POWDER

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Particulate Matter (PM) emissions from the wet dust collector shall not exceed 0.02 gr./dscf, 0.13 lb/hr, and 0.6 tons per year on a twelve (12) month rolling sum.

Control Device Efficiency Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The pressure drop across the wet dust collector shall be maintained at a minimum of 0.5 inch w.g. and not exceed a maximum of 8.0 inches w.g.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(1) The permittee shall monitor the pressure drop across the wet dust collector on a daily basis, when the process is in operation

(2) The permittee shall calculate the PM emissions, hourly (based on average monthly operating hours) and 12 month rolling sum using the emission factors from the most recent stack test.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(1) The permittee shall keep daily records, when the process is in operation, of the pressure drop across the wet dust collector.

(2) The permittee shall keep records of the PM emission calculations, hourly based on an averaged operating hours and monthly as well as 12 month rolling sum.

V. REPORTING REQUIREMENTS.

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

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

The sources located in this building shall be operated and maintained in a manner consistent with good operating practice.

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

(1) The following sources shall be operating in conjunction with the wet dust collector

- (a) speed mills
- (b) pin crushers
- (c) tray loader

(2) The associated sources/production activities shall be shutdown during APC unit maintenance or utilities maintenance activities on plant utilities that effects the APC unit function.

(3) The associated sources/production activities shall be shut down in a reasonable amount of time during APC unit malfunctions and utility outages that effect the APC unit function.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 1

Group Description: boilers

Sources included in this group

ID	Name
031	SUPERIOR BOILER 1
032	SUPERIOR BOILER 2

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

Particulate matter emissions from this boiler shall not exceed 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from any combustion unit, in the Southeast Air Basin, in excess of 1.2 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.22(e)(1).

Fuel Restriction(s).**# 003 [25 Pa. Code §123.22]****Combustion units**

Pursuant to 25 Pa. Code § 123.22(e)(2), the sulfur content in No. 2 fuel oil fired in this boiler shall not exceed 0.05 percent by weight.

II. TESTING REQUIREMENTS.**# 004 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained for each fuel oil delivery made.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]

The permittee shall monitor daily, when in operation:

**SECTION E. Source Group Restrictions.**

- (a) the amount and type of fuel used,
- (b) the hours of operation.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.512(h) and 129.93.]

Each adjustment conducted under the tune-up procedures for this boiler shall be recorded in a format suitable and readily available for expeditious review and contains the following:

- (a) The date of the tuning procedure.
- (b) The name of the service company and technician.
- (c) The final operating rate or load.
- (d) The final CO and NOx emission rates.
- (e) The final excess oxygen rate.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]

The permittee shall keep records, daily on weekdays and on the next business day following weekends and holidays, of:

- (a) the amount and type of fuel used,
- (b) the hours of operation.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 10

Group Description: scrubbers without RACT 2

Sources included in this group

ID	Name
101	TANTALUM RECYCLE DIGESTION (B-87)
123	ORE DIGESTION (B-73)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The permittee shall keep daily records, when the process is operating, of:

- (1) The make-up flow rate to the scrubber;
- (2) The pressure drop across the scrubber; and
- (3) The recycle water flow rate to the scrubber.

(b) The permittee shall keep records of:

- (1) the dates of the inspection and maintenance performed;
- (2) any deficiencies/malfunctions and the corrective action taken

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall monitor once per day, when the process is operating:

- (1) The make-up flow rate of the scrubber;
- (2) The pressure drop across the scrubber; and,
- (3) The recycle flow rate to the scrubber.

**SECTION E. Source Group Restrictions.****VI. WORK PRACTICE REQUIREMENTS.**

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

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 2

Group Description: Boiler MACT

Sources included in this group

ID	Name
031	SUPERIOR BOILER 1
032	SUPERIOR BOILER 2
034	JOHNSTON BOILER 3

I. RESTRICTIONS.**Fuel Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7499]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What are the subcategories of boilers and process heaters?**

Beginning January 31, 2016 and thereafter, this boiler is in a subcategory of a unit designed to burn gas 1 that burns only natural gas. The boiler may burn No. 2 fuel oil during periods of gas curtailment or gas supply interruptions of any duration, or for periodic testing, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What records must I keep?**

The permittee must keep records of a copy of each notification and report submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7560]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****In what form and how long must I keep my records?**

The permittee shall, according to 40 C.F.R. §63.10(b),

(a) Keep the records in a form suitable and readily available for expeditious review.

(b) Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) Keep each record on site, or the records must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records can be kept off site for the remaining 3 years.

**SECTION E. Source Group Restrictions.****V. REPORTING REQUIREMENTS.****# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7545]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What notifications must I submit and when?**

As per 40 C.F.R. §63.7545(f), the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 C.F.R. §63.7575. The notification must include the information specified in paragraphs (1) through (5) below.

- (1) Company name and address.
- (2) Identification of the affected unit.
- (3) Reason of unable to use natural gas, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.
- (4) Type of alternative fuel intend to use.
- (5) Dates when the alternative fuel use is expected to begin and end.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

(a) The permittee must submit each report, by January 31, according to 40 C.F.R. §63.7550(h)(3) and the requirements specified below:

(1) The first compliance report must cover the period beginning on January 31, 2016 and ending on January 31, 2017, and must be postmarked or submitted no later than January 31, 2017.

(2) Annual compliance reports must cover 1-year periods from January 1 to December 31, and must be submitted in accordance with provisions for annual certificate of compliance reports in Section C of this Operating Permit, as per 40 C.F.R. §63.10(a)(5).

(b) A compliance report must contain the information specified below:

- (i) Company and Facility name and address.
- (ii) Boiler information.
- (iii) Date of report and beginning and ending dates of the reporting period.
- (iv) The total operating time during the reporting period.

(v) The date of the most recent tune-up for the boiler, and the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled boiler shutdown.

(c) As per 40 C.F.R. §63.7550(h)(3), the permittee must submit the reports electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. §63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator.

VI. WORK PRACTICE REQUIREMENTS.**# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What emission limits, work practice standards, and operating limits must I meet?**

**SECTION E. Source Group Restrictions.**

[Additional authority of this permit condition is also derived from 25 Pa. Code §129.97(d).]

As per 40 C.F.R. §63.7500(a), the permittee must operate and maintain the boiler, at all times, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

When must I conduct subsequent performance tests or fuel analyses, or tune-ups?

As per 40 C.F.R. §63.7515(d), the permittee must conduct an annual performance tune-up according to 40 C.F.R. §63.7540(a)(10). Each annual tune-up must be no more than 13 months after the previous tune-up.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 4

Group Description: scrubbers

Sources included in this group

ID	Name
102	TANTALUM SALTS PROCESS (B-19)
124	EXTRACTION PROCESS (B-74)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

The permittee shall monitor once per day, when the process is operating:

- (1) The make-up flow rate of the scrubber;
- (2) The pressure drop across the scrubber; and,
- (3) The recycle flow rate to the scrubber.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512]

(a) The permittee shall keep daily records, when the process is operating, of:

- (1) The make-up flow rate to the scrubber;
- (2) The pressure drop across the scrubber; and
- (3) The recycle water flow rate to the scrubber.

(b) The permittee shall keep records of:

- (1) the dates of the inspection and maintenance performed;
- (2) any deficiencies/malfunctions and the corrective action taken

[Compliance with this condition demonstrates compliance with 25 Pa. Code §129.100(d).]

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

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 5

Group Description: all

Sources included in this group

ID	Name
101	TANTALUM RECYCLE DIGESTION (B-87)
111	WIRE CLEANING PROCESS (B-58)
126	SODIUM REDUCTION PROCESS (B-49)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The sources located in this building shall be operated and maintained in accordance with manufacturers' specifications and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 6

Group Description: Engines

Sources included in this group

ID	Name
040	EXISTING EMERGENCY SI RICE (<=500HP)
041	EXISTING EMERGENCY CI RICE (<=500HP)
042	EXISTING EMERGENCY CI RICE (>500HP)
044	NEW EMERGENCY SI ICE

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

001 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from each emergency generator in a manner that the concentration of the sulfur oxides, expressed as SO₂, in the effluent gas exceeds 500 ppmvd.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

002 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices for the control of the VOC emissions.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 8

Group Description: HF only

Sources included in this group

ID	Name
101	TANTALUM RECYCLE DIGESTION (B-87)
123	ORE DIGESTION (B-73)

I. RESTRICTIONS.**Control Device Efficiency Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code 127.512]

The Hydrogen Flouride (HF) emissions are controlled by the scrubber. The scrubber shall operate at a minimum of 90% destruction efficiency.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: 9

Group Description: 25 Pa. Code §129.99 (c) & (d)

Sources included in this group

ID	Name
102	TANTALUM SALTS PROCESS (B-19)
124	EXTRACTION PROCESS (B-74)
201	WASTEWATER TREATMENT PLANT

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512 and 25 Pa. Code §129.99(c).]

The sources located in this building shall be operated and maintained in accordance with manufacturers' specifications and good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

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

***** Permit Shield in Effect. *****



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
031	SUPERIOR BOILER 1		
Emission Limit			
1.200	Lbs/MMBTU		SOX
0.400	Lbs/MMBTU		TSP
032	SUPERIOR BOILER 2		
Emission Limit			
1.200	Lbs/MMBTU		SOX
0.400	Lbs/MMBTU		TSP
034	JOHNSTON BOILER 3		
Emission Limit			
0.035	Lbs/MMBTU	firing NG	NOX
0.176	Lbs/MMBTU	firing NO. 2	NOX
2.200	Lbs/Hr	firing NG	NOX
11.050	Lbs/Hr	firing NO. 2	NOX
30.000	PPMV	firing NG; @ 3% O2	NOX
34.090	Tons/Yr	firing both; 12 month rolling	NOX
132.000	PPMV	firing NO. 2; @ 3% O2	NOX
1.200	Lbs/MMBTU		SOX
0.400	Lbs/MMBTU		TSP
040	EXISTING EMERGENCY SI RICE (<=500HP)		
Emission Limit			
500.000	PPMV		SOX
041	EXISTING EMERGENCY CI RICE (<=500HP)		
Emission Limit			
500.000	PPMV		SOX
042	EXISTING EMERGENCY CI RICE (>500HP)		
Emission Limit			
500.000	PPMV		SOX
044	NEW EMERGENCY SI ICE		
Emission Limit			
500.000	PPMV		SOX
101	TANTALUM RECYCLE DIGESTION (B-87)		
Emission Limit			
0.200	Lbs/Hr	HF emissions	Hydrogen Fluoride
0.900	Tons/Yr	HF emissions - 12 month rolling	Hydrogen Fluoride

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
102	TANTALUM SALTS PROCESS (B-19)		
Emission Limit		Pollutant	
0.150	Lbs/Hr		Hydrochloric Acid
0.670	Tons/Yr	12 month rolling sum	Hydrochloric Acid
0.730	Lbs/Hr		Hydrogen Fluoride
3.200	Tons/Yr	12 month rolling sum	Hydrogen Fluoride
0.020	gr/DRY FT3		TSP
0.040	gr/DRY FT3		TSP
0.430	Lbs/Hr		TSP
1.900	Tons/Yr	12 month rolling sum	TSP
109	TA ACID LEACHING/DRYING (B-47/101)		
Emission Limit		Pollutant	
0.150	Lbs/Hr	HCl Emissions (8 hr. avg.)	Hydrochloric Acid
0.700	Tons/Yr	HCl emissions - 12 month rolling	Hydrochloric Acid
0.070	Lbs/Hr	HF emissions (8 hr. avg.)	Hydrogen Fluoride
0.310	Tons/Yr	(HF) 12 month rolling	Hydrogen Fluoride
1.900	Lbs/Hr	8 hr. avg.	NOX
8.300	Tons/Yr	12 month rolling	NOX
0.020	gr/DRY FT3	PM emissions from C109A	TSP
0.300	Tons/Yr	12 month rolling	TSP
123	ORE DIGESTION (B-73)		
Emission Limit		Pollutant	
0.170	Lbs/Hr	HF emissions from scrubber exhaust	Hydrogen Fluoride
0.700	Tons/Yr	HF emissions - 12 month rolling	Hydrogen Fluoride
0.040	gr/CFM	25 Pa. Code §123.13(c)(1)(i)	PM10
124	EXTRACTION PROCESS (B-74)		
Emission Limit		Pollutant	
0.200	Lbs/Hr		Hydrogen Fluoride
0.900	Tons/Yr	12 month rolling sum	Hydrogen Fluoride
126	SODIUM REDUCTION PROCESS (B-49)		
Emission Limit		Pollutant	
0.001	Lbs/Hr	HF emissions from the scrubber	Hydrogen Fluoride
0.003	Tons/Yr	HF emissions from the scrubber - 12 month rolling	Hydrogen Fluoride
0.046	Lbs/Hr	HF emissions from mist eliminator	Hydrogen Fluoride
0.077	Tons/Yr	HF emissions from mist eliminator - 12 month rolling	Hydrogen Fluoride
0.020	gr/DRY FT3	From mist eliminator	TSP
0.020	gr/DRY FT3	From the dry dust collector	TSP
0.020	gr/DRY FT3	From the scrubber	TSP
0.070	Lbs/Hr	From the scrubber	TSP
0.130	Lbs/Hr	From the dry dust collector	TSP
0.170	Tons/Yr	From the dry dust collector - 12 month rolling	TSP

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
0.400	Tons/Yr	From the scrubber - 12 month rolling	TSP
0.580	Lbs/Hr	From mist eliminator	TSP
0.950	Tons/Yr	From mist eliminator - 12 month rolling	TSP
210	RAFFINATE SOLIDIFICATION PROCESS		
Emission Limit		Pollutant	
0.200	Tons/Yr	12-month rolling sum	Hydrogen Fluoride
2.700	Tons/Yr	12-month rolling sum	VOC
36-1	BLDG. 36/101		
Emission Limit		Pollutant	
0.020	gr/DRY FT3		TSP
0.130	Lbs/Hr		TSP
0.600	Tons/Yr	12 month rolling sum	TSP

Site Emission Restriction Summary

Emission Limit		Pollutant
241.700	Tons/Yr	Plantwide Applicability Limit (PAL)
		VOC

**SECTION H. Miscellaneous.**

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

- (a) Research and Development activities performed in Bldg 55, 98 and 106
- (b) Waste Oil Tanks,
- (c) Scrap Oil Tanks,
- (d) Chlorine Cylinders,
- (e) Sodium Hydroxide Storage,
- (f) 90 -98% Sulfuric Acid Storage,
- (g) Make-up Heaters
- (h) air conditioning, ventilation systems, cafeteria and routine office equipments
- (i) Non-VOC detergent washing and laundry operations, non-VOC/HAP containing stationary storage tanks
- (j) Maintenance activities, machine and maintenance shop equipments
- (k) Electrically Operated equipment
- (l) construction/ demolition work, clearing of land, roads & vehicle movement
- (m) Pilot Plant & Laboratory hoods, sources and fugitive emissions

B. The following sources are used in other buildings, but presently located in the following buildings:

Building 015

WWTP treatment tanks (RFD# 46-A01-2408)

Building 24

Dust collectors (RFD# 46-A01-1702)

Building 26

Dust collectors (RFD# 46-A01-1705)

Buildings 24, 29, 42, 60

Installation of mist eliminators on oil vacuum systems (RFD# 46-A01-2100)

Building 33

Wet grinder (RFD# 46-A01-2468)

Building 36:

Dust collector for furnace (RFD# 46-A01-1402)

Conversions of milling system (RFD# 46-A01-1858)

Screeners and material handling station (RFD# 46-A01-1884)

Exhaust system for mills (RFD# 46-A01-2099)

Building 42

Shredder (RFD# 46-A01-1973)

Building 47

Acid Mini-bulk (RFD# 46-A01-2304)

**SECTION H. Miscellaneous.**

Building 49
 Dryers (RFD# 46-A01-2056)
 Delumper, in-line whith crusher (RFD# 46-A01-2285)

Building 58
 Emergency generator (RFD# 46A01-2406)

Building 60
 EB Elder (RFD# 46-A01-2374)
 EB Emergency Generator (RFD# 46-A01-547)

Building 62
 Wastewater treatment (RFD# 46-A01-2503)

Building 62B
 Wastewater treatment (RFD# 46-A01-110)

Building 87
 Scrap Digestion (RFD# 46-A01-2483, 46-A01-556 and 46-A01-541)

Building 115:
 Crushers (RFD# 46-A01-1953)

C. The following previously issued Operating Permits serve as the basis for certain terms and conditions set forth in this Title V Permit:

OP-46-0037
 46-313-102
 46-313-006E

D 1. The capacity of the sources listed in Section A and D is for descriptive purposes only and does not represent an applicable requirements.

2. The emission limits in Section F are only a summary of the emission restrictions in Section C and D of the permit and are for informational purposes only.

E. Administrative Amendment

- (a) incorporation of Plan Approval 46-0037M for Building 47/101, Source 109
- (b) incorporation of Plan Approval 46-0037I for Building 55. Source 107 is removed from the permit as Building 55 is for research and Development only. The Source is added to Part A of this Section
- (c) incorporation of Plan Approval 46-0037G for Boiler No. 3
- (d) incorporation of Plan Approval 46-0037C for Building 87, Source 101
- (e) incorporation of Plan Approval 46-0037B for tray unloader/dust collector located in Building 19. The conditions were removed as the Plan Approval was revoked 6/20/2002.
- (f) incorporation of Plan Approvals 46-0037E & 46-0037K for Building 49, Source 126
- (g) incorporation of Plan Approval 46-313-147 for Building 47/101, Source 109
- (h) incorporation of Plan Approval 46-0037P for Building 73, Source 123.

F. Deviation Report Schedule

For the period between January 1st through June 30th, the report will be submitted by September 1st.

**SECTION H. Miscellaneous.**

For the period between July 1st through December 31st, the report will be submitted by March 1st.

G. Deactivated Sources

Source 103 Niobium Oxide Process (B-23)

Source 108 Niobium Oxide Kiln (B-14/90)

Source 033 B&W Boiler #3 was dismantled and removed 9/14/2001

H. APS: 344990 AUTH: 599242

Administrative Amendment to incorporate Plan Approval PA 46-0037N

APS: 344990 AUTH: 603278

The following conditions were amended.

o Source 102 - Tantalum Salt process, Building 19 -condition #005 pertaining to the production rate of Tantalum salts was removed as this condition appears in Section C, Site Level Requirements as Condition #009.

o Source 124 - Extraction Process, Building 74 - the Hydrogen Flouride (HF) emission limit was reduced from 1.1 tons per year to 0.9 tons per year and the Volatile Organic Compounds emission limit was reduced from 180.3 tons per year to 160.8 tons per year. In addition, the monitoring and recordkeeping requirements for MethylIsoButylKetone (MIBK) were added.

I. APS ID 344990, AUTH ID 644666

TVOP Renewal, TVOP amendment to incorporate Plan Approval Nos. PA-46-0037Q, 46-0037V, and 46-0037X.

J. APS ID 344990, AUTH ID 814706 (Application received on November 13, 2009)

TVOP amendment to incorporate Plan Approval No. 46-0037Y.

K. AUTH ID 852221, TVOP Administrative Amendment Application received on October 4, 2010 to incorporate Plan Approval No. 46-0037W.

L. AUTH ID 912356, Change of ownership from Cabot Supermetals (EIN 04-2271897) to Global Advance Metals USA, Inc. (EIN 45-3504668).

M. APS ID 771339; AUTH ID 953609, TVOP administrative amendment application received on December 5, 2012 to incorporate Plan Approval No. 46-0037AB.

N. Auth ID 993478, TVOP renewal (application received on 8/30/2013) and incorporate Boiler MACT (46-0037Z, AUTH 919386, application received on 11/30/2009).

O. Auth ID 1156496, TVOP significant Modification - RACT II.

P. Auth ID 1242827, Renewal of TVOP. The following RFDs were issued since the last renewal:

- a. Use of Sodium Reduction Reactor for Wire Cleaning (RFD #4488 - issued June 2014)
- b. Molten Salt Bath Replacement (RFD #4605 - issued August 2014)
- c. Sale of Flame Synthesis Material (RFD #4782 - issued November 2014)
- d. Temporary Tank Installation (RFD #4928 - issued January 2015)
- e. Barrel Dumping Hopper Replacement (RFD #5165 - issued June 2015)
- f. The operation of emergency generators (RFD #5891 - issued August 2016)
- g. Addition of Hydrogen Chloride to Heating Tanks (RFD #5983 - issued October 2016)
- h. Modifications to Building 19 Vacuum Drying System (RFD #6243 – issued March 2017)
- i. TEK15 Research and Development Process (RFD #7219 – issued August 2018)

Q. AUTH 1407731: TVOP amended to incorporate Plan Approval 46-0037AD.



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