

# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

### TITLE V/STATE OPERATING PERMIT

Issue Date:October 22, 2007Effective Date:February 29, 2012Revision Date:February 29, 2012Expiration Date:October 22, 2012

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: 04-00044

Federal Tax Id - Plant Code: 20-0447346-1

#### Owner Information

Name: HORSEHEAD CORP
Mailing Address: 300 FRANKFORT RD
MONACA, PA 15061-2260

Plant Information

Plant: HORSEHEAD CORP/MONACA SMELTER

Location: 04 Beaver County 04947 Potter Township

SIC Code: 3339 Manufacturing - Primary Nonferrous Metals, Nec

# Responsible Official

Name: THOMAS KAKASCIK

Title: DIRECTOR MONACA OPERATION

Phone: (724) 733 - 2284

### **Permit Contact Person**

Name: DAVID SWISHER Title: MGR, ENV AFFAIRS Phone: (724) 733 - 2284

[Signature] \_\_\_\_\_

MARK A. WAYNER, SOUTHWEST REGION AIR PROGRAM MANAGER





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Source	e ID Source Name	Capacity	/Throughput	Fuel/Material
032	LARGE AUX BOILER	25.100	MMBTU/HR	
002	LARGE AGA BOILLIN	10.000	MCF/HR	Natural Gas
033	SMALL AUX BOILER	27.000	MMBTU/HR	Natural Gas
000	OW EL NONDOILEN	2.510	MCF/HR	Natural Gas
034	COAL BOILER 1	600.000	MMBTU/HR	ridiara Gao
	OG/ E BOILERY 1	22.600		COAL
		10.000	MCF/HR	NATURAL GAS
035	COAL BOILER 2	600.000	MMBTU/HR	
	3. E 301E1. E	22.600	Tons/HR	Bituminous
		10.000	MCF/HR	NATURAL GAS
036	MAIN OFFICE BOILERS	1.300	MMBTU/HR	
		10.000	MCF/HR	NATURAL GAS
206	THAW HOUSE	6.000	MCF/HR	Natural Gas
207	ORE DRYER	75.000	Tons/HR	ZINC COCENTRATE
400	SINTER MIX CIRCUIT	60.000	Tons/HR	ZINC SINTER
401	SINTER MACHINE	60.000	Tons/HR	ZINC SINTER
403	MATERIAL HANDLING & SIZING	60.000	Tons/HR	ZINC SINTER
404	SINTER COOLING CONVEYOR		Tons/HR	ZINC SINTER
501	FURNACE METAL HANDLING	20.000	Tons/HR	ZINC METAL
502	FURNACE PREHEATERS 11-17	60.000	Tons/HR	SINTER&2NDARIES
506	ELECTROTHERMIC FCES	27.000	Tons/HR	ZINC
507	COMPRESSOR HOUSE		MCF/HR	CARBON MONOXIDE
508	COKE AND RESIDUE CIRCUIT		Tons/HR	COKE&ZN RESIDUE
510	SECONDARY MATERIALS BINS & FEED			
702	BULK MATERIAL STORAGE BUILDING			
703	CASCADE MILL EAST END	15.000	Tons/HR	ZINC 2NDARIES
705	SECONDARY SCREENING WEST		Tons/HR	ZN 2NDARIES
706	SECONDARY STORAGE	15.000		
800	DISTILLATION COLUMNS	20.000		ZINC METAL
801	OXIDE COLLECTORS			
802	REFINERY FEED POT	20.000	Tons/HR	ZINC METAL
803	OXIDE MATERIAL HANDLING	10.000	Tons/HR	
806	OXIDE TREATMENT			
809	PRODUCT DEVELOPMENT LAB			
903	ZINC DUST PLANT	2,000.000	Lbs/HR	ZINC DUST
904	LARVIK FURNACES 1-5	9.500	Tons/HR	ZINC EQUIVALENT
905	ZINC DUST SIZING CIRCUIT	1.500	Tons/HR	ZINC DUST
906	LARVIC PRODUCT COMBUSTER		Tons/HR	ZINC OXIDE
910	MISC SPACE HEATERS			
999	ALL SOURCES EXCEPT 034, 035, AND 401			
C01	MULTICLONE			





Source I	D Source Name	Capacity/Throughput	Fuel/Material
C02	PRIMARY ELEC. PRECIP.		
C03	SECONDARY ELEC. PRECIP.		
C04	MULTICLONE		
C05	PRIMARY ELEC. PRECIP.		
C06	SECONDARY ELEC. PRECIP.		
C08	LIME INJECTION UNIT 1		
C09	LIME INJECTION UNIT 2		
C10	SETTLING CHAMBERS 3 & 4		
C11	BAGHOUSE		
D01	ENVIRONMENTAL CYCLONE		
D02	ENVIRONMENTAL BAGHOUSE		
D03	PRODUCT CYCLONE		
D04	PROCESS COLLECTOR		
D05	PRODUCT BAGHOUSE		
D11	PRODUCT CYCLONE		
D12	PRODUCT BAGHOUSE		
D51	#27 OXIDE COLLECTOR		
D53	#26 OXIDE COLLECTOR		
D54	FABRIC FILTER		
D55	FABRIC COLLECTOR AEROPULSE		
D56	REFINERY SE BAGHOUSE		
D57	REFINERY FEED POT BAGHOUSE		
D58	OXIDE REHEAT CIRCUIT BAGHOUSE		
D60	REFINERY CADMIUM BAGHOUSE		
D61	REFINERY ALLOY POT BAGHOUSE		
D63	#28 OXIDE COLLECTOR		
D64	#23A OXIDE COLLECTOR		
D65	#23B OXIDE COLLECTOR		
D66	#24A OXIDE COLLECTOR		
D67	#24 OXIDE COLLECTOR		
D68	DEPT 16 MICROPULVERIZER BAGHOUSES (2)		
D69	DEPT 16 BUCKET ELEVATOR BAGHOUSE (2)		
D73	DEPT 06 BUCKET ELEVATOR BAGHOUSE		
D74	DEPT 06 AIR CLASSIFIER BAGHOUSE		
D75	PRODUCT DEVELOPMENT LAB BAGHOUSE		
D76	SECONDARY STORAGE BAGHOUSE		
D77	ZINC DUST CONDENSER BH		
D78	MICROPULVERIZER (06) BAGHOUSE		
E02	INTERMEDIATE DUST COLL.		
E03	PW DRACO BAGHOUSE		





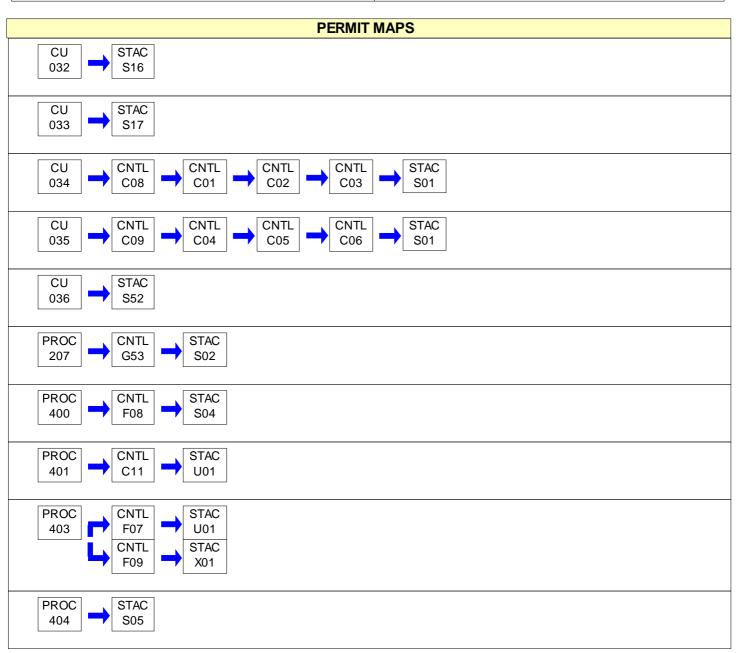
Source	ID Source Name	Capacity/Throughput	Fuel/Material
E04	FURNACE WEST END BAGHOUSE	. ,	
F05	BAGHOUSE		
F06	AERO PULSE BAGHOUSE		
F07	#1 BAGHOUSE		
F08	MIXED DRUM SCRUBBER		
F09	BIN VENT FEED MATERIAL		
F11	COKE AND RESIDUE BAGHOUSE		
G53	DUCON SCRUBBER 96-41 VVO		
H04	FABRIC COLLECTOR MIK PULSE		
H06	AERO PULSE		
H07	SECONDARY SCREENING SOUTH		
H08	NEW SECONDARIES BAGHOUSE		
S01	POWER PLANT STACK		
S02	ORE DRYER SCRUBBER STACK		
S04	MIX DRUM SCRUBBER STACK		
S05	SINTER COOLING CONVEYER		
S07	COKE & RESIDUE BAGHOUSE S		
S08	ZINC DUST SIZING CIRCUITT		
S09	FCE COLLECTOR ST (ZINC D)		
S10	LARVIK ENVIRONMENTAL STACK		
S11	FCE BASMT RELIEF STACKS (4)		
S12	LARVIK OXIDE COLLECTOR STACK		
S13	FURNACE W END BAGHOUSE		
S14	OXIDE REHEAT CIRCUIT BAG		
S16	LARGE AUX BOILER STACK		
S17	SMALL AUX BOILER STACK		
S18	SECONDARY SCREENS N BAGHOUSE		
S19	SECONDARY SCREENS S BAGHOUSE		
S20	CASCADE MILL BAGHOUSE STACK		
S22	REFINERY ALLOY POT BAG		
S23	REFINERY POT BAGHOUSE		
S39	PRODUCT DEVELOPMENT LAB		
S41	DEPT 06 BUCKET ELEVATOR		
S50	BULK MATERIAL STORAGE BAGHOUSE		
S51	SECONDARY STORAGE BAG		
S52	MAIN OFFICE BOILERS STACK		
T01	COMP HOUSE TORCHES (6)		
U01	400' MAIN		
U02	INTERMEDIATE COLLECTOR STACK		
U03	200' DRACO BAGHOUSE STACK		





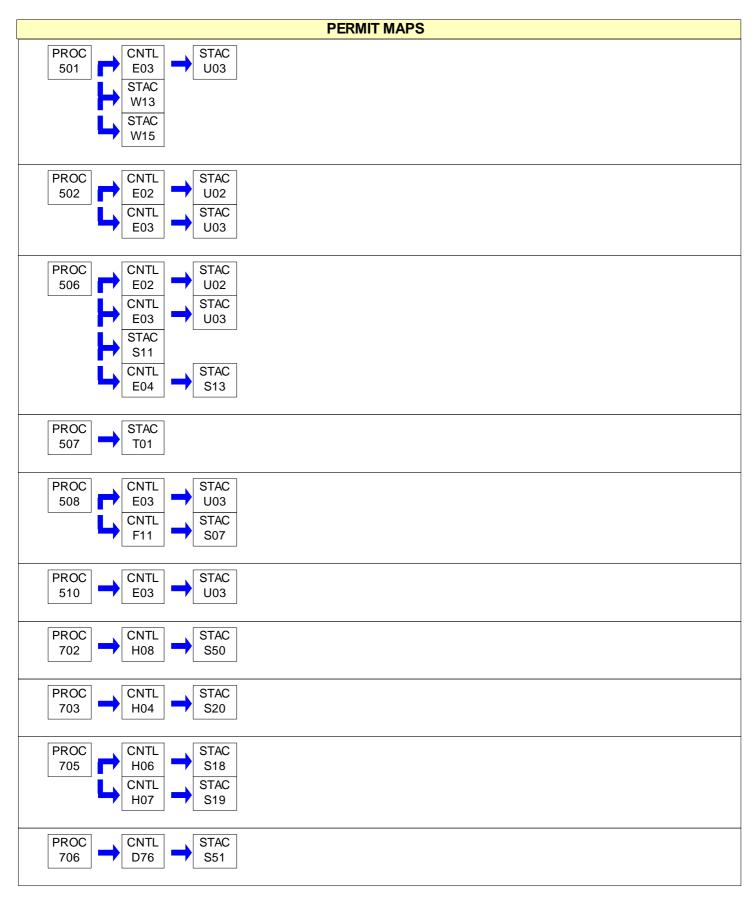


Source II	Source Name	Capacity/Throughput	Fuel/Material
W13	FMH 1 CAST MACH W. ST		
W15	FMH #5 CAST W. STACK		
X01	BIN VENT FEED MATERIAL		
X03	DEPT 16 MICROPULVERIZER		
X04	DEPT 16 BUCKET ELEVATOR		
X08	LARVIK ZN DUST PRODUCT		
X09	DEPT 06 MICROPULVERIZER		
X12	BUCKET ELEVATOR VENT		

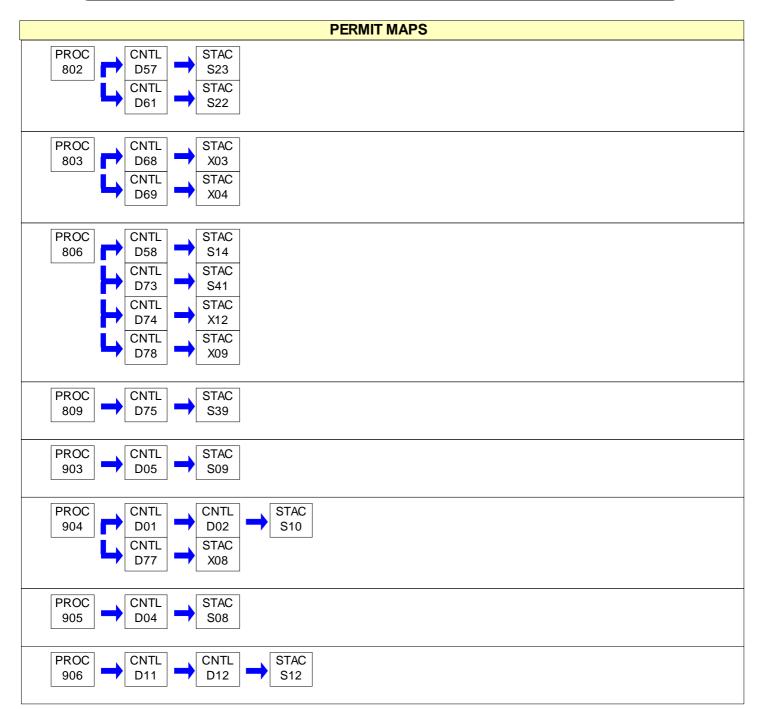














#001 [25 Pa. Code § 121.1]

**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 § 127.512(c)(4)]

**Property Rights** 

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

#003 [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.

#004 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]

#### **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.
- (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 submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also 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.

#005 [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 the Department.

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(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.

# #006 [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.

#### #007 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

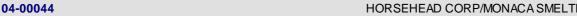
#### **Compliance Requirements**

- (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. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.512(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.



#### #009 [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.

#### #010 [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.

#### #011 [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.

#### #012 [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.

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#### #013 [25 Pa. Code §§ 121.1 & 127.462]

### **Minor Operating Permit Modifications**

- (a) The permittee may make minor operating permit modifications (as defined in 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (b) 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 an operational flexibility change authorized by 25 Pa. Code § 127.462.

#### #014 [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), according to procedures specified in § 127.450. Administrative amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder from being processed as an administrative amendment.
- (b) Upon taking final action granting a request for an administrative permit amendment in accordance with § 127.450(c), the Department will allow coverage under 25 Pa. Code § 127.516 (relating to permit shield) for administrative permit amendments which meet the relevant requirements of 25 Pa. Code Article III, unless precluded by the Clean Air Act or the regulations thereunder.

### #015 [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 to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#### #016 [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).
- (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.
- (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 administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.
- (f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).



#### #017 [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 NOx from a single source during the term of the permit and 5 tons of NOx 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.
- (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

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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) applies to de minimis emission increases and the installation of minor sources made pursuant to this permit condition.
- (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.

#### #018 [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).

#### #019 [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 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.



#### #020 [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:

Office of Air Enforcement and Compliance Assistance (3AP20)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(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.

### #021 [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.

# #022 [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.

# #023 [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 #020(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.

#### #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 should be postmarked or hand-delivered within thirty days of each anniversary date of the date of issuance or, of the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #020 of this section.

#### #025 [25 Pa. Code § 127.3]

# **Operational Flexibility**

(a) 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)
- (b) Unless precluded by the Clean Air Act or the regulations adopted thereunder, the permit shield authorized under 25 Pa. Code § 127.516 shall extend to operational flexibility changes made at this Title V facility pursuant to this permit condition and other applicable operational flexibility terms and conditions of this permit.

### #026 [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.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation

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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 Condition #24 of Section B of this Title V 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).

#### #027 [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.

#### #028 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(q)]

#### **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 on minor or significant permit modifications, and operational flexibility changes shall be covered by the permit shield. Upon taking final action granting a request for an administrative permit amendment, the Department will allow coverage of the amendment by the permit shield in § 127.516 for administrative amendments which meet the relevant requirements of 25 Pa. Code Article III.
- (d) The permit shield authorized under § 127.516 is in effect for the permit terms and conditions in this Title V permit, including administrative operating permit amendments and minor operating permit modifications.





#### SECTION C. **Site Level Requirements**

#### I. RESTRICTIONS.

#### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:
  - (1) Construction or demolition of buildings or structures.
  - (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
  - (4) Clearing of land.
  - (5) Stockpiling of materials.
- (6) Sources and classes of sources other than those identified in paragraphs (1)-(5), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.
- (b) The permittee may not permit fugitive particulate matter from sources specified in paragraph's (a)(1)-(6) if the emissions are visible at the point the emissions pass outside the person's property (25 PA Code 123.2).

#### [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 123.1(a)(1) -- (9)as stated in condition #001 (related to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

#### # 003 [25 Pa. Code §123.31]

### Limitations

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

#### # 004 [25 Pa. Code §123.41]

#### Limitations

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

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

#### # 005 [25 Pa. Code §123.42]

# **Exceptions**

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

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# **SECTION C.** Site Level Requirements

- (1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
- (4) When arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

#### # 006 [25 Pa. Code §129.14]

#### Open burning operations

- (a) No person may permit the open burning of material in an air basin.
- (b) EXCEPTIONS: The requirements stated in (a) do not apply where the open burning operations result from:
  - (1) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
  - (2) A fire set for the prevention and control of disease or pests, when approved by the Department.
  - (3) A fire set solely for recreational or ceremonial purposes.
  - (4) A fire set solely for cooking food.
- (5) A fire set to prevent or abate a fire hazzard, when approved by the Department and set by or under the supervision of a public officer.
- (c) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
  - (1) As used in this applicable requirement the following terms shall have the following meanings:

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

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

- (2) notwithstanding clearing and grubbing wastes may be burned subject to the following limitations:
- (i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease.
- (ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes that have been transported.

#### II. TESTING REQUIREMENTS.

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







#### SECTION C. **Site Level Requirements**

#### Ш MONITORING REQUIREMENTS.

#### # 007 [25 Pa. Code §123.43]

#### Measuring techniques

Visible emissions may be measured using either of the following:

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

### IV. RECORDKEEPING REQUIREMENTS.

#### # 008 [25 Pa. Code §135.5]

#### Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed informed by indirect means.

#### V. REPORTING REQUIREMENTS.

#### # 009 [25 Pa. Code §127.442]

#### Reporting requirements.

- (a) The owner or operator shall report each malfunction that poses an imminent and substantial danger to the public health and safety or the environment or which it should reasonably believe may result in citizens compliants to the Department that occurs at this Title V facility. For purposes of this condition a malfunction is defined as 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 that may result in an increase in the emissions of air contaminants.
- (b) When the malfunction poses an imminent and substantial danger to the public health and safety, the notification shall be submitted to the Department no later than one hour after the incident.
  - (1) The notice shall describe the:
    - (i) name and location of the facility;
    - (ii) nature and cause of the malfunction or breakdown;
    - (iii) time when the malfunction or breakdown was first observed;
    - (iv) expected duration of excess emissions; and
    - (v) estimated rate of emissions.
  - (2) The owner or operator shall notify the Department immediately when corrective measures have been accomplished.
- (3) Subsequent to the malfunction, the owner or operator shall submit a full report on the malfunction to the Department within 15 days, if requested.
- (4) The owner or operator shall submit reports on the operation and maintenance of the source to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and maintenance schedules.







# **SECTION C.** Site Level Requirements

(c) Malfunctions shall be reported to the Department at the following address:

PADEP Office of Air Quality 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412)442-4000

#### # 010 [25 Pa. Code §135.21]

#### **Emission statements**

- (a) The owner or operator shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.
- (b) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency, 401 M. Street, S.W., Washington, D.C. 20460. The Department may require more frequent submittals if the Department determines that one or more of the following applies:
  - (1) A more frequent submission is required by the EPA.
  - (2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.

# # 011 [25 Pa. Code §135.3]

#### Reporting

- (a) The owner/operator shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified during the same period which were not previously reported.
- (b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.
- (c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 012 [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

The permittee shall take all reasonable actions to prevent particulate matter from a source identified in 25 PA Code 123(a)(1)-(6) [Condition #001] from becoming airborne. These actions shall include, but not be limited to, the following:

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



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### **SECTION C.** Site Level Requirements

by trucking or earth moving equipment, erosion by water, or other means.

(d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

### VII. ADDITIONAL REQUIREMENTS.

### # 013 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The following Emission Reduction Credits (ERC's) have been awarded to Horsehead Corporation for the shutdown of the Acid Roaster Plant at the Monaca Smelter Facility. The memo dated August 3, 2005 determined the following ERC's are available:

Pollutant	ERCs (tons)
PM10	9.4
PM2.5	3.2
SOx	382.5
NOx	3.3
VOC	0
CO	1.4
PB	0.04

# # 014 [25 Pa. Code §139.1]

#### Sampling facilities.

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

#### 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).

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### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

### \*\*\* Permit Shield In Effect \*\*\*







Source ID: 032 Source Name: LARGE AUX BOILER

Source Capacity/Throughput: 25.100 MMBTU/HR

10.000 MCF/HR Natural Gas



#### 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.

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. \*\*\*



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### **SECTION D.** Source Level Requirements

Source ID: 033 Source Name: SMALL AUX BOILER

Source Capacity/Throughput: 27.000 MMBTU/HR

2.510 MCF/HR Natural Gas

CU 033 STAC S17

#### I. RESTRICTIONS.

# **Emission Restriction(s).**

### # 001 [25 Pa. Code §123.11]

#### **Combustion units**

- (a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:
- (1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

#### # 002 [25 Pa. Code §123.22]

#### **Combustion units**

Lower Beaver Valley air basin.

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from any combustion unit in excess of any of the rate of one pound per million Btu of heat input.

#### # 003 [25 Pa. Code §129.93]

#### **Presumptive RACT emission limitations**

The presumptive RACT emission limitation is the installation, maintenance and operation of the source in accordance with manufacturers specifications.

#### 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).



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# **SECTION D.** Source Level 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. \*\*\*

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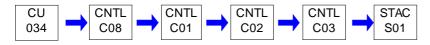


Source ID: 034 Source Name: COAL BOILER 1

> Source Capacity/Throughput: 600.000 MMBTU/HR

> > 22.600 Tons/HR COAL

10.000 MCF/HR NATURAL GAS



This source occurs in alternate operation

#### RESTRICTIONS.

#### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.11]

#### **Combustion units**

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter in excess of 0.1 pounds per million Btu of heat input.

#### # 002 [25 Pa. Code §123.22]

#### **Combustion units**

- (d) Allegheny County, Lower Beaver Valley, and Monongahela Valley air basins. No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from any combustion unit in excess of any of the following.
- (2) The rate determined by the following formula: A = 1.7E-0.14, where: A = allowable emissions in pounds per million Btu of heat input, and E = Heat input to the combustion unit in millions of Btus per hours when E is equal to or greater than 50 but less than 2000.

In the Lower Beaver Valley and Monongahela Valley air basins, exceedances of the SO2 "at any time" emission standard will be subject to a daily penalty assessment determined by the enforement policy. For purposes of this condition only, the "at any time" standard given in 123.22(d) will be enforced to be the "daily average maximum not to be exceeded at any time"

#### # 003 [25 Pa. Code §123.41]

### Limitations

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

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

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Power Plant's coal fired boilers No. 1 and No. 2 shall not exceed 0.45 lb/MM BTU of NOx emissons.

#### TESTING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate

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compliance with the particualte matter (PM-10) limitations, the CEM opacity monitor which determines control device (ESP) performance, and maintaining voltage reading of greater than 150 volts on the last of the six operating fields.

- I. Indicator: Performance Testing
- (a) Measurement Approach: Conduct emissions testing to demonstrate compliance with the PM-10 emission limitation.
- (b) Indicator Range: An excursion is identified as any emission monitoring that does not meet the permitted emission limitations. An excursion will trigger an internal inspection and corrective action.
- (c) Performance Criteria:
- (i) Data Representativeness: A test protocol will be submitted to the Department and approved prior to conducting the performance test.
  - (ii) Verification of Operational Status: Operational parameters are recorded as part of the test protocol.
  - (iii) QA/QC Practices and Criteria: Conduct testing according to test protocol and approved EPA test methodology.
- (iv) Monitoring Frequency: Conduct a performance test on each boiler for particualte (PM-10) within the first year of issuance of this Title V Renewal Operating Permit.
  - (v) Data Collection Procedures: Per approved test method.
  - (vi) Average Period: Not Applicable.
- II. Indicator: Voltage Readings
- (a) Measurement Approach: Computerized and visually recorded readings of the volts in the last operating field.
- (b) Indicator Range: An excursion is identified as any reading that is less than 150 volts across the the last operating field. An excursion will trigger an internal inspection and corrective action.
- (c) Performance Criteria:
- (i) Data Representativeness: A voltage reading of greater than 150 volts on the last operating field indicates proper operation.
- (ii) Verificiation of Operational Status: Computerized readings of precipitator voltage along with employees log every two hours of operation.
  - (iii) QA/QC Practices and Criteria: N/A
  - (iv) Monitoring Frequency: Continuous
  - (v) Data Collection Procedurs: Computerized printouts and daily logs.
  - (vI) Averaging Period: N/A
- III. Indicator: CEM Opacity Monitor.





### # 006 [25 Pa. Code §139.102]

#### References.

The following are references of this subchapter:

- (1) "Standards of Performance for New Stationary Sources," 40 CFR Chapter I, Subchapter C, Part 60, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-9328.
- (2) "Minimum Emission Monitoring Requirements," 40 CFR Subchapter C, Part 51, Appendix P, Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402-9328.
- (3) "Continuous Source Monitoring Manual," Commonwealth of Pennsylvania, Department of Environmental Resources, Bureau of Air Quality Control, Post Office Box 8468, Harrisburg, Pennsylvania 17105-8468.

#### III. MONITORING REQUIREMENTS.

## # 007 [25 Pa. Code §123.25]

#### **Monitoring requirements**

- (a) A source subject to this section shall install, operate and maintain continuous SO2 monitoring systems in compliance with Chapter 139 Subchapter C (relating to requirements of continuous in-stack monitoring for stationary sources). Results of emission monitoring shall be submitted to the Department on a regular basis in compliance with Chapter 139, Subchapter C.
- (b) Continuous SO2 monitoring systems installed under this section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

#### # 008 [25 Pa. Code §123.46]

#### **Monitoring requirements**

- a) The permittee shall install, operate and maintain continuous opacity monitoring devices in compliance with 25 Pa. Code Chapter 139 Subchapter C (relating to requirements for continuous in-stack monitoring for stationary sources). Results of the opacity monitoring shall be submitted to the Department on a regular basis in compliance with Chapter 139 Subchapter C.
- b) The Department may use the data from the monitoring devices required by this condition to enforce the visible emission limitations defined in this permit.

### # 009 [25 Pa. Code §123.51]

# **Monitoring requirements**

(b) Sources subject to this section shall

install, operate and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C (relating to requirements for continuous in-stack monitoring for statutory sources).

- (c) Sources subject to this section shall submit results on a regular schedule and in a format acceptable to the Department and in compliance with Chapter 139, Subchapter C.
- (d) Continuous nitrogen oxides monitoring systems installed under the requirements of this section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

# 010 [25 Pa. Code §139.103]



#### Opacity monitoring requirements.

This section applies to sources monitoring opacity.

- (1) Opacity measurements shall be converted to represent plume opacity as described in the manual referenced in 139.102(3) (relating to references). The conversion method shall be approved by the Department.
- (2) Opacity monitoring systems shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title for a particular process:
- (i) At least 90% of the hours in each calendar month shall be valid hours as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (ii) At least 95% of the hours in each calendar quarter shall be valid hours as set forth in the quality assurance section of the manual referenced in 139.102(3).

#### 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.

### # 011 [25 Pa. Code §139.101] General requirements.

This section applies to monitoring systems as defined in the manual referenced at 139.102(3) (relating to references), installations required or approved under Chapters 122, 124, 127 and 129 or in an order issued under section 4 of the act (35 P. S. 4004).

- (1) The submittal procedures specified in the publication entitled "Continuous Source Monitoring Manual," available from the Department shall be utilized to obtain Department approval. This publication includes:
  - (i) Installation requirements.
  - (ii) Performance specifications.
  - (iii) Test procedures.
  - (iv) Reporting requirements.
  - (v) Quality assurance requirements.
  - (vi) Administrative procedures for obtaining Department approval.
- (2) The monitoring system installation, certification and operation shall be conducted under the direct supervision of

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persons qualified by training and experience.

- (3) The monitoring systems may be designed to monitor source emissions or stack emissions if the representativeness of emissions can be verified. The method of conversion of monitoring results to source or stack emissions shall be approved by the Department.
- (4) The location of monitoring devices shall be approved by the Department prior to installation. The selection of the monitoring location shall utilize applicable criteria in the manual referenced in 139.102(3). The Department has the authority to determine which of the criteria are applicable. The representativeness of the measurements at the chosen monitoring location shall be verified.
- (5) The owner of a monitored source shall maintain records containing monitoring information and report data to the Department as specified in the manual referenced in 139.102(3). The records shall be maintained for 5 years and be available for inspection by Department personnel.
- (6) The owner of a monitored source shall provide permanent sampling facilities as specified in 139.1 (relating to sampling facilities) to permit verification testing by the Department. For extractive monitors, calibration gas inlets shall be available as near as possible to the monitor probe inlet to permit the Department to verify calibration of the monitoring system. Facilities shall be approved by the Department prior to construction.
- (7) Verification testing for monitoring systems shall be in accordance with Subchapter B (relating to monitoring duties of certain sources), and of the manual referenced in 139.102(3).
- (8) A quality assurance program shall be established and maintained by the owner of the monitored source. This program shall be in accordance with the criteria in the sources listed in 139.102.
- (9) The Department's approval will be based on the criteria specified in the manual referenced in 139.102(3). Failure to utilize the specified procedures or to conduct the quality assurance program could result in denying or rescinding the Department's approval.
- (10) The owner of a monitored source shall notify the Department when the monitoring system is inoperative for more than 1 hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within 2 hours of the malfunction.
- (11) Manual sampling conducted under Subchapter B may be required if the Department determines that the monitoring system data is not accurate or that the owner of the monitored source does not conduct the quality assurance program specified in the manual referenced in 139.102(3).
- (12) Required monitoring shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title, in a plan approval or permit condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under section 4 of the act. For purposes of calculating data availability, "process down" time, as specified in the manual referenced in 139.102(3), shall be considered valid time.
- (i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (ii) In each calendar quarter, at least 95% of the hours during which the monitored source is operating shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (13) The monitor results shall be expressed in terms of the applicable standard or criteria required. The method used to convert monitor data shall be approved by the Department.
- (14) Monitoring systems shall comply with the applicable performance specifications section of the manual referenced in 139.102(3). The Department has the authority to determine which of the performance specifications are applicable.







- (15) Verification of calibration standards shall be conducted in accordance with the applicable sampling methods in the Department's "Source Testing Manual" or as otherwise approved by the Department. The "Source Testing Manual" may be obtained from the Department.
- (16) The requirements of this section apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.

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



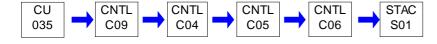




Source ID: 035 Source Name: COAL BOILER 2

> Source Capacity/Throughput: 600.000 MMBTU/HR

> > 22.600 Tons/HR Bituminous 10.000 MCF/HR NATURAL GAS



This source occurs in alternate operation

#### RESTRICTIONS.

#### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §123.11]

#### **Combustion units**

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter in excess of 0.1 pounds per million Btu of heat input.

#### # 002 [25 Pa. Code §123.22]

#### **Combustion units**

- (d) Allegheny County, Lower Beaver Valley, and Monongahela Valley air basins. No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from any combustion unit in excess of any of the following.
- (2) The rate determined by the following formula: A = 1.7E-0.14, where: A = allowable emissions in pounds per million Btu of heat input, and E = Heat input to the combustion unit in millions of Btus per hours when E is equal to or greater than 50 but less than 2000.

In the Lower Beaver Valley and Monongahela Valley air basins, exceedances of the SO2 "at any time" emission standard will be subject to a daily penalty assessment determined by the enforement policy. For purposes of this condition only, the "at any time" standard given in 123.22(d) will be enforced to be the "daily average maximum not to be exceeded at any time"

#### # 003 [25 Pa. Code §123.41]

### Limitations

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

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

#### # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Power Plant's coal fired boilers No. 1 and No. 2 shall not exceed 0.45 lb/MM BTU of NOx emissons.

#### TESTING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

As part of their compliance assurance monitoring (CAM) plan, the permittee will conduct a performance test to demonstrate





compliance with the particualte matter (PM-10) limitations, the CEM opacity monitor which determines control device (ESP) performance, and maintaining voltage reading of greater than 150 volts on the last of the six operating fields.

- I. Indicator: Performance Testing
- (a) Measurement Approach: Conduct emissions testing to demonstrate compliance with the PM-10 emission limitation.
- (b) Indicator Range: An excursion is identified as any emission monitoring that does not meet the permitted emission limitations. An excursion will trigger an internal inspection and corrective action.
- (c) Performance Criteria:
- (i) Data Representativeness: A test protocol will be submitted to the Department and approved prior to conducting the performance test.
  - (ii) Verification of Operational Status: Operational parameters are recorded as part of the test protocol.
  - (iii) QA/QC Practices and Criteria: Conduct testing according to test protocol and approved EPA test methodology.
- (iv) Monitoring Frequency: Conduct a performance test on each boiler for particualte (PM-10) within the first year of issuance of this Title V Renewal Operating Permit.
  - (v) Data Collection Procedures: Per approved test method.
  - (vi) Average Period: Not Applicable.
- II. Indicator: Voltage Readings
- (a) Measurement Approach: Computerized and visually recorded readings of the volts in the last operating field.
- (b) Indicator Range: An excursion is identified as any reading that is less than 150 volts across the the last operating field. An excursion will trigger an internal inspection and corrective action.
- (c) Performance Criteria:
- (i) Data Representativeness: A voltage reading of greater than 150 volts on the last operating field indicates proper operation.
- (ii) Verificiation of Operational Status: Computerized readings of precipitator voltage along with employees log every two hours of operation.
  - (iii) QA/QC Practices and Criteria: N/A
  - (iv) Monitoring Frequency: Continuous
  - (v) Data Collection Procedurs: Computerized printouts and daily logs.
  - (vI) Averaging Period: N/A
- III. Indicator: CEM Opacity Monitor.





#### # 006 [25 Pa. Code §139.102]

#### References.

The following are references of this subchapter:

- (1) "Standards of Performance for New Stationary Sources," 40 CFR Chapter I, Subchapter C, Part 60, Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402-9328.
- (2) "Minimum Emission Monitoring Requirements," 40 CFR Subchapter C, Part 51, Appendix P, Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402-9328.
- (3) "Continuous Source Monitoring Manual," Commonwealth of Pennsylvania, Department of Environmental Resources, Bureau of Air Quality Control, Post Office Box 8468, Harrisburg, Pennsylvania 17105-8468.

#### III. MONITORING REQUIREMENTS.

#### # 007 [25 Pa. Code §123.25]

#### **Monitoring requirements**

- (a) A source subject to this section shall install, operate and maintain continuous SO2 monitoring systems in compliance with Chapter 139 Subchapter C (relating to requirements of continuous in-stack monitoring for stationary sources). Results of emission monitoring shall be submitted to the Department on a regular basis in compliance with Chapter 139, Subchapter C.
- (b) Continuous SO2 monitoring systems installed under this section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

#### # 008 [25 Pa. Code §123.46]

#### Monitoring requirements

- a) The permittee shall install, operate and maintain continuous opacity monitoring devices in compliance with 25 Pa. Code Chapter 139 Subchapter C (relating to requirements for continuous in-stack monitoring for stationary sources). Results of the opacity monitoring shall be submitted to the Department on a regular basis in compliance with Chapter 139 Subchapter C.
- b) The Department may use the data from the monitoring devices required by this condition to enforce the visible emission limitations defined in this permit.

#### # 009 [25 Pa. Code §123.51]

# **Monitoring requirements**

(b) Sources subject to this section shall

install, operate and maintain continuous nitrogen oxides monitoring systems and other monitoring systems to convert data to required reporting units in compliance with Chapter 139, Subchapter C (relating to requirements for continuous in-stack monitoring for statutory sources).

- (c) Sources subject to this section shall submit results on a regular schedule and in a format acceptable to the Department and in compliance with Chapter 139, Subchapter C.
- (d) Continuous nitrogen oxides monitoring systems installed under the requirements of this section shall meet the minimum data availability requirements in Chapter 139, Subchapter C.

#010 [25 Pa. Code §139.103]



### Opacity monitoring requirements.

This section applies to sources monitoring opacity.

- (1) Opacity measurements shall be converted to represent plume opacity as described in the manual referenced in 139.102(3) (relating to references). The conversion method shall be approved by the Department.
- (2) Opacity monitoring systems shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title for a particular process:
- (i) At least 90% of the hours in each calendar month shall be valid hours as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (ii) At least 95% of the hours in each calendar quarter shall be valid hours as set forth in the quality assurance section of the manual referenced in 139.102(3).

#### 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.

## # 011 [25 Pa. Code §139.101] General requirements.

This section applies to monitoring systems as defined in the manual referenced at 139.102(3) (relating to references), installations required or approved under Chapters 122, 124, 127 and 129 or in an order issued under section 4 of the act (35 P. S. 4004).

- (1) The submittal procedures specified in the publication entitled "Continuous Source Monitoring Manual," available from the Department shall be utilized to obtain Department approval. This publication includes:
  - (i) Installation requirements.
  - (ii) Performance specifications.
  - (iii) Test procedures.
  - (iv) Reporting requirements.
  - (v) Quality assurance requirements.
  - (vi) Administrative procedures for obtaining Department approval.
  - (2) The monitoring system installation, certification and operation shall be conducted under the direct supervision of



persons qualified by training and experience.

- (3) The monitoring systems may be designed to monitor source emissions or stack emissions if the representativeness of emissions can be verified. The method of conversion of monitoring results to source or stack emissions shall be approved by the Department.
- (4) The location of monitoring devices shall be approved by the Department prior to installation. The selection of the monitoring location shall utilize applicable criteria in the manual referenced in 139.102(3). The Department has the authority to determine which of the criteria are applicable. The representativeness of the measurements at the chosen monitoring location shall be verified.
- (5) The owner of a monitored source shall maintain records containing monitoring information and report data to the Department as specified in the manual referenced in 139.102(3). The records shall be maintained for 5 years and be available for inspection by Department personnel.
- (6) The owner of a monitored source shall provide permanent sampling facilities as specified in 139.1 (relating to sampling facilities) to permit verification testing by the Department. For extractive monitors, calibration gas inlets shall be available as near as possible to the monitor probe inlet to permit the Department to verify calibration of the monitoring system. Facilities shall be approved by the Department prior to construction.
- (7) Verification testing for monitoring systems shall be in accordance with Subchapter B (relating to monitoring duties of certain sources), and of the manual referenced in 139.102(3).
- (8) A quality assurance program shall be established and maintained by the owner of the monitored source. This program shall be in accordance with the criteria in the sources listed in 139.102.
- (9) The Department's approval will be based on the criteria specified in the manual referenced in 139.102(3). Failure to utilize the specified procedures or to conduct the quality assurance program could result in denying or rescinding the Department's approval.
- (10) The owner of a monitored source shall notify the Department when the monitoring system is inoperative for more than 1 hour during an air pollution episode as specified in Chapter 137 (relating to air pollution episodes). The notice shall be given within 2 hours of the malfunction.
- (11) Manual sampling conducted under Subchapter B may be required if the Department determines that the monitoring system data is not accurate or that the owner of the monitored source does not conduct the quality assurance program specified in the manual referenced in 139.102(3).
- (12) Required monitoring shall meet at least one of the following minimum data availability requirements unless other data availability requirements are stipulated elsewhere in this title, in a plan approval or permit condition under Chapter 127 (relating to construction, modification, reactivation and operation of sources), or in an order issued under section 4 of the act. For purposes of calculating data availability, "process down" time, as specified in the manual referenced in 139.102(3), shall be considered valid time.
- (i) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (ii) In each calendar quarter, at least 95% of the hours during which the monitored source is operating shall be valid as set forth in the quality assurance section of the manual referenced in 139.102(3).
- (13) The monitor results shall be expressed in terms of the applicable standard or criteria required. The method used to convert monitor data shall be approved by the Department.
- (14) Monitoring systems shall comply with the applicable performance specifications section of the manual referenced in 139.102(3). The Department has the authority to determine which of the performance specifications are applicable.







- (15) Verification of calibration standards shall be conducted in accordance with the applicable sampling methods in the Department's "Source Testing Manual" or as otherwise approved by the Department. The "Source Testing Manual" may be obtained from the Department.
- (16) The requirements of this section apply to monitoring to demonstrate compliance with emissions standards and process operational parameter criteria.



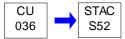




Source ID: 036 Source Name: MAIN OFFICE BOILERS

Source Capacity/Throughput: 1.300 MMBTU/HR

10.000 MCF/HR NATURAL GAS



#### I. RESTRICTIONS.

## **Emission Restriction(s).**

## # 001 [25 Pa. Code §123.11]

#### **Combustion units**

- (a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:
- (1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

### # 002 [25 Pa. Code §123.22]

#### **Combustion units**

Lower Beaver Valley air basin.

No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from any combustion unit in excess of any of the rate of one pound per million Btu of heat input.

## # 003 [25 Pa. Code §129.93]

### **Presumptive RACT emission limitations**

The presumptive RACT emission limitation is the installation, maintenance and operation of the source in accordance with manufacturers specifications.

#### 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).



Source ID: 206 Source Name: THAW HOUSE

Source Capacity/Throughput: 6.000 MCF/HR Natural Gas

### 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.

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. \*\*\*

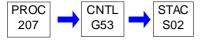
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Source ID: 207 Source Name: ORE DRYER

Source Capacity/Throughput: 75.000 Tons/HR ZINC COCENTRATE



#### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

# 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

### 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.

## # 003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

# 004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take imediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AM to 5:00 PM excluding holidays) for

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## **SECTION D.** Source Level Requirements

occurances lasting more than 4 hours, owner operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

## VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 400 Source Name: SINTER MIX CIRCUIT

Source Capacity/Throughput: 60.000 Tons/HR ZINC SINTER



#### I. RESTRICTIONS.

### **Emission Restriction(s).**

## # 001 [25 Pa. Code §123.24]

#### **Primary zinc smelters**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any zinc sintering operation at any time in excess of the rate calculated by the following formula:

Y = 0.054X

where:

X = Calcine feed rate to the sinter plant (lbs/hr); and

Y = Allowable sulfur oxide emissions (lbs/hr).

#### **Operation Hours Restriction(s).**

### # 002 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The operation of the sinter line(sinter machine, feed handling circuit and pre-mix drum) shall not exceed 8100 hours per consecutive 12 month period. (Note: Operating permit #04-308-033, expired 4/30/99)

## Control Device Efficiencies Restriction(s).

## # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Particulate matter/PM10 emissions from the number 4 baghouse shall not exceed .01 gr/dscf. (Note: Operating permit #04-308-033, expired 4/30/99)

## 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.

The owner/operator shall operate and maintain the Department approved monitoring device (tribo-flow meter) to indicate bag failure of the #4 baghouse. (Note: Operating permit #04-308-033, expired 4/30/99)

#### 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).





## **SECTION D.** Source Level Requirements

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

# 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

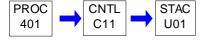
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





Source ID: 401 Source Name: SINTER MACHINE

Source Capacity/Throughput: 60.000 Tons/HR ZINC SINTER



This source occurs in alternate operation

#### I. RESTRICTIONS.

## **Emission Restriction(s).**

### # 001 [25 Pa. Code §123.24]

#### **Primary zinc smelters**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any zinc sintering operation at any time in excess of the rate calculated by the following formula:

Y = 0.054X

where:

X = Calcine feed rate to the sinter plant (lbs/hr); and

Y = Allowable sulfur oxide emissions (lbs/hr).

#### # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Combined SO2 emissions shall not exceed 2050 lbs/hr and 6377.5 tons/year (Note: Permit #04-308-033, expired 4/30/99)

#### **Operation Hours Restriction(s).**

## # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The operation of the sinter line(sinter machine, feed handling circuit and pre-mix drum) shall not exceed 8100 hours per consecutive 12 month period. (Note: Operating permit #04-308-033, expired 4/30/99)

## Control Device Efficiencies Restriction(s).

## # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Particulate matter/PM10 emissions from the number 4 baghouse shall not exceed .01 gr/dscf. (Note: Operating permit #04-308-033, expired 4/30/99)

## II. TESTING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.511]

#### Monitoring and related recordkeeping and reporting requirements.

The owner or operator shall perform stack testing once during the term of the permit (5 years) to demonstrate compliance with the mass emission limitation. This testing shall be performed within on year (12 months) of the issuance of the Title V Operating permit.

## III. MONITORING REQUIREMENTS.

#### # 006 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The owner/operator shall operate and maintain the Department approved monitoring device (tribo-flow meter) to indicate bag failure of the #4 baghouse. (Note: Operating permit #04-308-033, expired 4/30/99)







#### 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.

#### # 007 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

## [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AMTO 5:00 PM excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

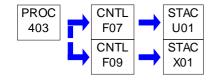
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





Source ID: 403 Source Name: MATERIAL HANDLING & SIZING

Source Capacity/Throughput: 60.000 Tons/HR ZINC SINTER



#### I. RESTRICTIONS.

## **Emission Restriction(s).**

### # 001 [25 Pa. Code §123.24]

#### **Primary zinc smelters**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any zinc sintering operation at any time in excess of the rate calculated by the following formula:

Y = 0.054X

where:

X = Calcine feed rate to the sinter plant (lbs/hr); and

Y = Allowable sulfur oxide emissions (lbs/hr).

## # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Combined SO2 emissions shall not exceed 2050 lbs/hr and 6377.5 tons/year (Note: Permit #04-308-033, expired 4/30/99)

## **Operation Hours Restriction(s).**

## # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The operation of the sinter line(sinter machine, feed handling circuit and pre-mix drum) shall not exceed 8100 hours per consecutive 12 month period. (Note: Operating permit #04-308-033, expired 4/30/99)

#### Control Device Efficiencies Restriction(s).

#### # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Particulate matter/PM10 emissions from the number 4 baghouse shall not exceed .01 gr/dscf. (Note: Operating permit #04-308-033, expired 4/30/99)

#### 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.

## # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The owner/operator shall operate and maintain the Department approved monitoring device (tribo-flow meter) to indicate bag failure of the #4 baghouse. (Note: Operating permit #04-308-033, expired 4/30/99)







#### 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.

#### # 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

## [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AMTO 5:00 PM excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

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







Source ID: 404 Source Name: SINTER COOLING CONVEYOR

> Source Capacity/Throughput: 60.000 Tons/HR ZINC SINTER



#### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

#### # 002 [25 Pa. Code §123.24]

#### **Primary zinc smelters**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any zinc sintering operation at any time in excess of the rate calculated by the following formula:

Y = 0.054X

where:

X = Calcine feed rate to the sinter plant (lbs/hr); and

Y = Allowable sulfur oxide emissions (lbs/hr).

#### Operation Hours Restriction(s).

#### # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The operation of the sinter line(sinter machine, feed handling circuit and pre-mix drum) shall not exceed 8100 hours per consecutive 12 month period. (Note: Operating permit #04-308-033, expired 4/30/99)

## Control Device Efficiencies Restriction(s).

#### # 004 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Particulate matter/PM10 emissions from the number 4 baghouse shall not exceed .01 gr/dscf. (Note: Operating permit #04-308-033, expired 4/30/99)

## 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.

#### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The owner/operator shall operate and maintain the Department approved monitoring device (tribo-flow meter) to indicate bag failure of the #4 baghouse. (Note: Operating permit #04-308-033, expired 4/30/99)







#### 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.

#### # 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

## [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

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

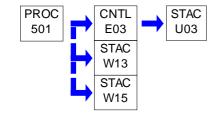






Source ID: 501 Source Name: FURNACE METAL HANDLING

> Source Capacity/Throughput: 20.000 Tons/HR ZINC METAL



#### 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 this process in such a manner that the concentration of particulate matter in the effluent gas exceeds .02 grains per dry standard cubic foot.

#### # 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

#### # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

## 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.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

#### 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.

# 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take imediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AM to 5:00 PM excluding holidays) for occurances lasting more than 4 hours, owner operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

[25 Pa. Code §127.511]

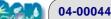
Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed mehtods.

#### VII. ADDITIONAL REQUIREMENTS.

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

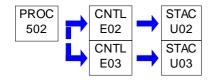






Source ID: 502 Source Name: FURNACE PREHEATERS 11-17

> Source Capacity/Throughput: 60.000 Tons/HR SINTER&2NDARIES



#### 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 this process in such a manner that the concentration of particulate matter in the effluent gas exceeds .02 grains per dry standard cubic foot.

#### # 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

#### # 003 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

#### 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.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

### 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).





## **SECTION D.** Source Level Requirements

#### VI. WORK PRACTICE REQUIREMENTS.

# 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take imediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AM to 5:00 PM excluding holidays) for occurances lasting more than 4 hours, owner operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

# 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed mehtods.

#### VII. ADDITIONAL REQUIREMENTS.

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

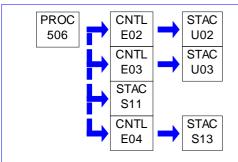






Source ID: 506 Source Name: ELECTROTHERMIC FCES

Source Capacity/Throughput: 27.000 Tons/HR ZINC



#### 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 this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

## # 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

## 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.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

#### 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.

# 004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take imediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AM to 5:00 PM excluding holidays) for occurances lasting more than 4 hours, owner operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### 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. \*\*\*

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Source ID: 507 Source Name: COMPRESSOR HOUSE

Source Capacity/Throughput: 400.000 MCF/HR CARBON MONOXIDE



#### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

# 002 [25 Pa. Code §123.21]

#### **General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

### 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.

# 003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

# 004 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take imediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AM to 5:00 PM excluding holidays) for

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occurances lasting more than 4 hours, owner operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

## 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. \*\*\*

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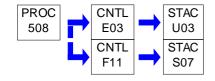






Source ID: 508 Source Name: COKE AND RESIDUE CIRCUIT

> Source Capacity/Throughput: 30.000 Tons/HR COKE&ZN RESIDUE



#### 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).

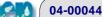
#### VI. WORK PRACTICE REQUIREMENTS.

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).

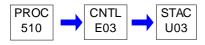






Source ID: 510 Source Name: SECONDARY MATERIALS BINS & FEED

Source Capacity/Throughput:



#### I. RESTRICTIONS.

## **Emission Restriction(s).**

### # 001 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

#### 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.

#### # 002 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

### 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. \*\*\*

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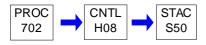




#### SECTION D. **Source Level Requirements**

Source ID: 702 Source Name: BULK MATERIAL STORAGE BUILDING

Source Capacity/Throughput:



#### Ι. 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

#### [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Particulate matter emissions shall not exceed .01 gr/dscf at the bulk material storage building. Compliance with this restriction ensures that the emissions will comply with the applicable SIP standard of 25 PA

Code 123.13 of .04 gr/dscf. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit.)

#### # 003 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Visible emissions shall not exceed 10% opacity at the bulk material storage building. Compliance with this standard ensures meeting the applicable SIP standard of 25 PA Code 123.41 of 20%. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

#### 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.

The baghouse shall be equipped with a magnahelic gauge or equivalent device to accurately measure the differential pressue drop across the baghouse for determining it's cleaning cycle. (Note: Operating permit 04-044B expires on the effective date of the Title V permit)

## [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Differential pressure drop across the baghouse shall not exceed the maximum limit specified by the manufacturer. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

#### 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).

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#### VI. WORK PRACTICE REQUIREMENTS.

#### # 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

# 007 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

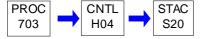
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).



## **SECTION D.** Source Level Requirements

Source ID: 703 Source Name: CASCADE MILL EAST END

Source Capacity/Throughput: 15.000 Tons/HR ZINC 2NDARIES



#### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

#### # 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Particulate matter emissions shall not exceed .01 gr/dscf at the bulk material storage building. Compliance with this restriction ensures that the emissions will comply with the applicable SIP standard of 25 PA Code 123.13 of .04 gr/dscf. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit.)

#### # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Visible emissions shall not exceed 10% opacity at the bulk material storage building. Compliance with this standard ensures meeting the applicable SIP standard of 25 PA Code 123.41 of 20%. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

#### # 004 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

#### 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.

## # 005 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The baghouse shall be equipped with a magnahelic gauge or equivalent device to accurately measure the differential pressue drop across the baghouse for determining it's cleaning cycle. (Note: Operating permit 04-044B expires on the effective date of the Title V permit)

## # 006 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Differential pressure drop across the baghouse shall not exceed the maximum limit specified by the manufacturer. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

## # 007 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

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#### 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.

#### # 008 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

## [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

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

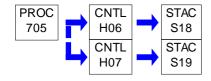


# WOO W

## **SECTION D.** Source Level Requirements

Source ID: 705 Source Name: SECONDARY SCREENING WEST

Source Capacity/Throughput: 15.000 Tons/HR ZN 2NDARIES



#### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

# 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Particulate matter emissions shall not exceed .01 gr/dscf at the bulk material storage building. Compliance with this restriction ensures that the emissions will comply with the applicable SIP standard of 25 PA Code 123.13 of .04 gr/dscf. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit.)

# 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Visible emissions shall not exceed 10% opacity at the bulk material storage building. Compliance with this standard ensures meeting the applicable SIP standard of 25 PA Code 123.41 of 20%. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

## # 004 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

### 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.

## # 005 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The baghouse shall be equipped with a magnahelic gauge or equivalent device to accurately measure the differential pressue drop across the baghouse for determining it's cleaning cycle. (Note: Operating permit 04-044B expires on the effective date of the Title V permit)

# 006 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Differential pressure drop across the baghouse shall not exceed the maximum limit specified by the manufacturer. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

# 007 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory

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analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

#### 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.

### [25 Pa. Code §127.511]

## Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

#### # 009 [25 Pa. Code §127.511]

### Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

#### VII. ADDITIONAL REQUIREMENTS.

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

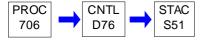




## **SECTION D.** Source Level Requirements

Source ID: 706 Source Name: SECONDARY STORAGE

Source Capacity/Throughput: 15.000 Tons/HR



#### I. RESTRICTIONS.

## **Emission Restriction(s).**

## # 001 [25 Pa. Code §123.13]

#### **Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

#### # 002 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Particulate matter emissions shall not exceed .01 gr/dscf at the bulk material storage building. Compliance with this restriction ensures that the emissions will comply with the applicable SIP standard of 25 PA Code 123.13 of .04 gr/dscf. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit.)

#### # 003 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Visible emissions shall not exceed 10% opacity at the bulk material storage building. Compliance with this standard ensures meeting the applicable SIP standard of 25 PA Code 123.41 of 20%. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

### 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.

The baghouse shall be equipped with a magnahelic gauge or equivalent device to accurately measure the differential pressue drop across the baghouse for determining it's cleaning cycle. (Note: Operating permit 04-044B expires on the effective date of the Title V permit)

## # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Differential pressure drop across the baghouse shall not exceed the maximum limit specified by the manufacturer. (Note: Operating Permit 04-044B expires on the effective date of the Title V permit)

#### 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.

#### # 006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

# 007 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### VII. ADDITIONAL REQUIREMENTS.

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





#### SECTION D. **Source Level Requirements**

Source ID: 800 Source Name: DISTILLATION COLUMNS

> Source Capacity/Throughput: 20.000 Tons/HR ZINC METAL

### 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 this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

#### # 002 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Particulate matter emissions from refinery oxide facility shall not exceed 189.2 tpy. (Note: Permit 04-308-004C, expired 4/30/99)

#### # 003 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Particulate matter/PM10 emissions shall not exceed 0.011 grains/dscf. 08-004C Particulate matter/PM10 emissions shall not exceed 0.011 grain/dscf.(Note: Permit 04-308-004C, expired 4/30/99)

#### # 004 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

#### # 005 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

In accordance with Plan Approval PA-04-00044B, when operating Column A in zinc oxide production mode, emissions from each zinc oxide collector shall be limited from each collector as follows:

Pollutant lbs/hr Consecutive 12-month period

PM-10 2.45 10.74 tons

#### # 006 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

In accordance with Plan Approval PA-04-00044B, when operating Column A in zinc oxide production mode, the exhaust from each zinc oxide collector shall be limited to 0.009 grains/dry standard cubic foot.

#### # 007 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

In accordance with Plan Approval PA-04-00044B, when operating Column A in zinc oxide production mode, the owner/operator shall not exhaust greater than 10% opacity from either of the two zinc oxide collectors.

#### 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.

#### # 008 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

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#### 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.

#### # 009 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take imediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 AM to 5:00 PM excluding holidays) for occurances lasting more than 4 hours, owner operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

#### # 010 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed mentods.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Plan Approval PA-04-00044B was issued to Horsehead on September 4, 2007 to authorize a modification of existing "A" Cadmium Column to a Swing Column capable of producing either de-cad metal (traditional mode) or zinc oxide product (zinc oxide production mode). PA-04-00044B authorized the installation of two blow boxes and two product collectors (fabric filters) for use in the zinc oxide production mode.

#### # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The net contemporaneous increase of PM-10 from the modifications authorized in 2007 by PA-04-00044B is 12.7 tons per year. Below summarizes the increases and decreases from this facility during the 10 year period between 1997 and 2007.

21.5 tpy (modification of "A" column) + 0.6 tpy (Ore Dryer - DeMinimis Increase) - 9.4 tons of ERC's generated from the shutdown fo the Acid Roaster = 12.7 tpy Net Increase in PM-10 Emissions.

#### # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In accordance with Plan Approval PA-04-00044B, the owner/operator has offset the particulate emission increase with ERCs that qualify as credible reductions generated by the shutdown of the Acid Roaster in October of 2002 at this site. Those emission reduction credits were removed from the Pennsylvania Registry when Column A commenced operation in the zinc oxide production mode.





Source ID: 801 Source Name: OXIDE COLLECTORS

Source Capacity/Throughput:

### I. RESTRICTIONS.

# **Emission Restriction(s).**

### # 001 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

### 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.

# # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

### 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. \*\*\*

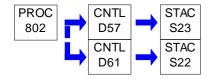






Source ID: 802 Source Name: REFINERY FEED POT

> Source Capacity/Throughput: 20.000 Tons/HR ZINC METAL



### RESTRICTIONS.

### **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Particulate matter emissions from refinery oxide facility shall not exceed 189.2 tpy. (Note: Permit 04-308-004C, expired 4/30/99)

#### # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Particulate matter/PM10 emissions shall not exceed 0.011 grains/dscf. 08-004C Particulate matter/PM10 emissions shall not exceed 0.011 grain/dscf.(Note: Permit 04-308-004C, expired 4/30/99)

# [25 Pa. Code §127.441]

### Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

### 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.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

### 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.

# 005 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.







In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed mentods.

# VII. ADDITIONAL REQUIREMENTS.

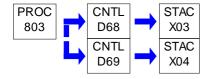
No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





Source ID: 803 Source Name: OXIDE MATERIAL HANDLING

Source Capacity/Throughput: 10.000 Tons/HR



### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

Particulate matter emissions from refinery oxide facility shall not exceed 189.2 tpy. (Note: Permit 04-308-004C, expired 4/30/99)

### # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Particulate matter/PM10 emissions shall not exceed 0.011 grains/dscf. 08-004C Particulate matter/PM10 emissions shall not exceed 0.011 grain/dscf.(Note: Permit 04-308-004C, expired 4/30/99)

### 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.

# # 003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed mentods.

# VII. ADDITIONAL REQUIREMENTS.

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





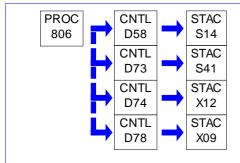
\*\*\* Permit Shield in Effect. \*\*\*





Source ID: 806 Source Name: OXIDE TREATMENT

Source Capacity/Throughput:



### 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).

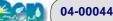
### VI. WORK PRACTICE REQUIREMENTS.

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).







Source ID: 809 Source Name: PRODUCT DEVELOPMENT LAB

Source Capacity/Throughput:



#### Ι. 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.

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).



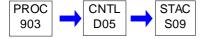
# HORSEHEAD CORP/MONACA SMELTER



# **SECTION D.** Source Level Requirements

Source ID: 903 Source Name: ZINC DUST PLANT

Source Capacity/Throughput: 2,000.000 Lbs/HR ZINC DUST



### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

# # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

# 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.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

# 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.

# # 004 [25 Pa. Code §127.511]

# Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.





# **SECTION D.** Source Level Requirements

# VII. ADDITIONAL REQUIREMENTS.

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





# **SECTION D.** Source Level Requirements

Source ID: 904 Source Name: LARVIK FURNACES 1-5

Source Capacity/Throughput: 9.500 Tons/HR ZINC EQUIVALENT



### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

### 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 §127.511]

Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

# VII. ADDITIONAL REQUIREMENTS.

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

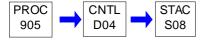
# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 905 Source Name: ZINC DUST SIZING CIRCUIT

Source Capacity/Throughput: 1.500 Tons/HR ZINC DUST



### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

# # 002 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The sources in this Group have the potential to be affected units for Best Available Retrofit Technology (BART) purposes. The owner/operator has chosen to take a permit limitation to restrict the combined emissions from these units to less than 249 tons per rolling 12-month period for each visibility impairing pollutant (NOx, VOC, PM10, and SOX).

# 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.

Compliance with BART mass emission limits established here shall be demonstrated using engineering calculations based on fuel and raw material purchase records, manufacturers specifications, AP-42 emission factors, laboratory analyses, source test results, operating records, material balance methods, and/or other applicable methods with written Departmental approval.

# 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.

# # 004 [25 Pa. Code §127.511]

# Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.





# M South

# **SECTION D.** Source Level Requirements

# VII. ADDITIONAL REQUIREMENTS.

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

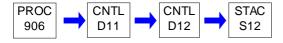




# **SECTION D.** Source Level Requirements

Source ID: 906 Source Name: LARVIC PRODUCT COMBUSTER

Source Capacity/Throughput: 1.600 Tons/HR ZINC OXIDE



### 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 this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot.

### 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 §127.511]

# Monitoring and related recordkeeping and reporting requirements.

In the event that visible emissions are observed the owner or operator shall take immediate corrective action to eliminate visible emissions. Additionally, during normal working hours (weekdays 8:00 am to 5:00 pm excluding holidays), for occurrences lasting for more than four hours, owner or operator shall verify compliance with the opacity standards specified in this permit through prescribed methods.

### 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. \*\*\*







Source ID: 910 Source Name: MISC SPACE HEATERS

Source Capacity/Throughput:

### 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.

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. \*\*\*





Source ID: 999 Source Name: ALL SOURCES EXCEPT 034, 035, AND 401

Source Capacity/Throughput:

This source occurs in alternate operation

### 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.

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.** Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.





# **SECTION F.** Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



SECTION G. Miscellaneous.





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