



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

### STATE ONLY OPERATING PERMIT

Issue Date: June 26, 2013 Effective Date: November 13, 2015

Revision Date: November 13, 2015 Expiration Date: May 31, 2018

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 unless otherwise designated.

### State Only Permit No: 25-00090

Synthetic Minor

Federal Tax Id - Plant Code: 25-1040754-6

### **Owner Information**

Name: ZURN IND LLC

Mailing Address: 1801 PITTSBURGH AVE

ERIE, PA 16502-1916

### Plant Information

Plant: ZURN IND LLC/CAST METALS DIV

Location: 25 Erie County 25001 Erie City

SIC Code: 3321 Manufacturing - Gray And Ductile Iron Foundries

### Responsible Official

Name: PATRICK REILLY Title: PLANT MANAGER Phone: (814) 937 - 4332

### **Permit Contact Person**

Name: DANIEL MURAWSKI Title: DIRECTOR OF EHS Phone: (814) 636 - 9724

[Signature]

MATTHEW M. WILLIAMS, ACTING NORTHWEST REGION AIR PROGRAM MANAGER



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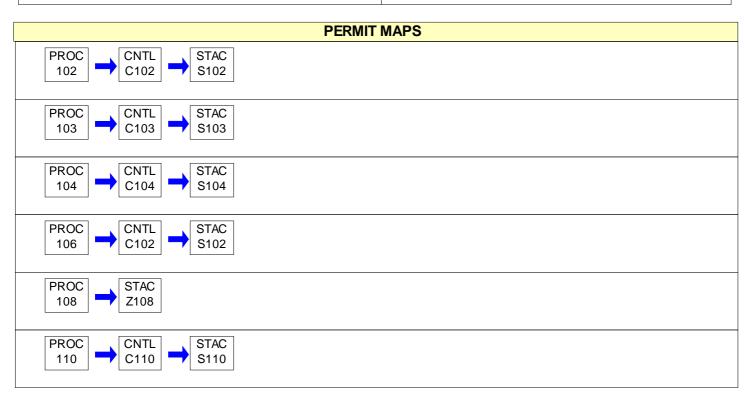
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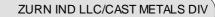
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### SECTION A. Site Inventory List

Source	e ID Source Name	Capacity	Throughput	Fuel/Material
102	MOLDING, POURING, COOLING	14.000	Tons/HR	COOLED CASTINGS
		14.000	Tons/HR	MOLTEN IRON
		14.000	Tons/HR	POURED CASTINGS
103	SAND HAND,MOLD,POUR,COOL,SHAKEOUT	14.000	Tons/HR	IRON CASTINGS
		14.000	Tons/HR	POURED CASTINGS
		14.000	Tons/HR	COOLED CASTINGS
		14.000	Tons/HR	FOUNDRY SAND
104	CASTING CLEANING	14.000	Tons/HR	CLEANED CASTINGS
106	CLEANING MACHINE (WHEELABRATOR)	500.000	Lbs/HR	CLEANED CASTINGS
108	NATURAL GAS USAGE FROM SHAKEOUT	5.000	MCF/HR	Natural Gas
110	ELECTRIC INDUCTION MELT FURNACES (4)	14.000	Tons/HR	MOLTEN IRON
112	REFRACTORYTORCHES	0.600	MCF/HR	REFRACTORY HEATER
C102	MOLD, POUR, COOL BAGHOUSE			
C103	SAND HAND,MOLD,POUR,COOL,SHAKEOUT BAGHOUSE			
C104	CASTING CLEANING DUST COLLECTOR			
C110	ETA2000 BAGHOUSE			
S102	MOLD, POUR, COOL STACK			
S103	SAND HAND,MOLD,POUR,COOL,SHAKEOUT STACK			
S104	CASTING CLEANING STACK			
S110	INDUCTION FURNACE BAGHOUSE STACK			
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### **PERMIT MAPS**

PROC STAC Z112



#001 [25 Pa. Code § 121.1]

Definitions.

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

#002 [25 Pa. Code § 127.446]

**Operating Permit Duration.** 

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

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

Permit Renewal.

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

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

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



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

- (b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).
  - (1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.
  - (2) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.
- (c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund".

### #005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]

**Transfer of Operating Permits.** 

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

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

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

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

Compliance Requirements.

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes



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

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

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

#009 [25 Pa. Code §§ 127.442(a) & 127.461]

**Duty to Provide Information.** 

- (a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.
- (b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

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

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

#011 [25 Pa. Code §§ 127.450 & 127.462]

**Operating Permit Modifications** 

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



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

- (b) Administrative Amendments. The permittee shall make administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.
- (c) Minor Operating Permit Modifications. The permittee shall make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

### #012 [25 Pa. Code § 127.441]

Severability Clause.

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

### #013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

- (a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:
  - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.
- (b) The Department may disapprove or condition de minimis emission increases at any time.
- (c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of 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, the regulations thereunder or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:



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

### #014 [25 Pa. Code § 127.3]

### Operational Flexibility.

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

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)



- (6) Section 127.462 (relating to minor operating permit modifications)
- (7) Subchapter H (relating to general plan approvals and general operating permits)

### #015 [25 Pa. Code § 127.11]

25-00090

### Reactivation

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

### #016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

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

### #017 [25 Pa. Code § 121.9]

### Circumvention.

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

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

### Reporting Requirements.

- (a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.
- (b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.
- (c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

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

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



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

### #019 [25 Pa. Code §§ 127.441(c) & 135.5]

### Sampling, Testing and Monitoring Procedures.

- (a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.
- (b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

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

### Recordkeeping.

- (a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:
  - (1) The date, place (as defined in the permit) and time of sampling or measurements.
  - (2) The dates the analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of the analyses.
  - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

### #021 [25 Pa. Code § 127.441(a)]

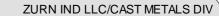
**Property Rights.** 

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

#022 [25 Pa. Code § 127.447]

**Alternative Operating Scenarios.** 

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





### I. RESTRICTIONS.

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

25-00090

### # 001 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

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

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
  - (4) Clearing of land.
  - (5) Stockpiling of materials.
  - (6) Open burning operations.
  - (7) Not applicable.
  - (8) Not applicable.
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

### # 002 [25 Pa. Code §123.2]

### Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code §123.1(a)(1)—(9) (relating to prohibition of certain fugitive emissions) [above in permit Condition #001 of this section] if the 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 25 Pa. Code §123.41 (relating to limitations) [in permit condition above] shall not apply to a visible emission in any of the following instances:





- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in Section C, Condition #001 (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 §127.12b]

### Plan approval terms and conditions.

Emissions of Hazardous Air Pollutants (HAP) in any 12 consecutive month period shall be less than 10 tons of any individual HAP and less than 25 tons of total HAPs.

[From plan approval 25-090D Condition 001.]

#### # 007 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) Particulate Matter emissions from all sources combined shall be less than 100 tpy.
- (b) VOC emissions from all sources combined shall be less than 50 tpy.
- (c) NOx emissions from all sources combined shall be less than 100 tpy.
- (d) CO emissions from all sources combined shall be less than 100 tpy.

### Throughput Restriction(s).

#### # 008 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

This facility is limited to melting less than 122,571 tons of metal per year.

[From plan approval 25-090E Condition 001.]

### TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

#### # 009 [25 Pa. Code §123.43]

### Measuring techniques

Visible emissions may be measured using either of the following:

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

### RECORDKEEPING REQUIREMENTS.

#### #010 [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 information by indirect means.

### # 011 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

This facility will keep a daily record of the tons of metal melted. This will be totaled monthly. The monthly totals from the previous eleven (11) months will be added with the current month to form a twelve month rolling total.

[From plan approval 25-090E Condition 002.]

### # 012 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

- (a) The permittee shall maintain a record of Particulate Matter emissions from the facility in terms of tons per year, based on a 12 consecutive month total. Each month, the total for the latest month shall be added with the previous 11 months to get the current 12 consecutive month total.
- (b) The permittee shall maintain a record of VOC emissions from the facility in terms of tons per year, based on a 12 consecutive month total. Each month, the total for the latest month shall be added with the previous 11 months to get the current 12 consecutive month total.
- (c) The permittee shall maintain a record of NOx emissions from the facility in terms of tons per year, based on a 12 consecutive month total. Each month, the total for the latest month shall be added with the previous 11 months to get the current 12 consecutive month total.
- (d) The permittee shall maintain a record of CO emissions from the facility in terms of tons per year, based on a 12 consecutive month total. Each month, the total for the latest month shall be added with the previous 11 months to get the current 12 consecutive month total.
- (e) The permittee shall maintain a record of emissions of individual and total HAPs from the facility in terms of tons per year, based on a 12 consecutive month total. Each month, the total for the latest month shall be added with the previous 11 months to get the current 12 consecutive month total.
- (f) The monthly records of all emissions shall be maintained for a period of 5 years.

### # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10890]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my management practices and compliance requirements?

- (a) [Paragraph 63.10890(a) is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (b) (c) [Paragraphs 63.10890(b) and (c) are printed under REPORTING REQUIREMENTS in this section of permit.]
- (d) As required by § 63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
- (e) You must maintain records of the information specified in paragraphs (e)(1) through (7) of this section according to the requirements in § 63.10(b)(1).
- (1) Records supporting your initial notification of applicability and your notification of compliance status according to § 63.10(b)(2)(xiv).
  - (2) Records of your written materials specifications according to § 63.10885(a) and records that demonstrate





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compliance with the requirements for restricted metallic scrap in § 63.10885(a)(1) and/or for the use of general scrap in § 63.10885(a)(2) and for mercury in § 63.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with § 63.10885(b)(4) for scrap that does not contain motor vehicle scrap.

- (3) If you are subject to the requirements for a site-specific plan for mercury switch removal under § 63.10885(b)(1), you must:
- (i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered; and
- (ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under § 63.10885(b)(1)(ii)(C). You must identify which option in paragraph § 63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (f) of this section.
- (4) If you are subject to the option for approved mercury programs under § 63.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If you purchase motor vehicle scrap from a broker, you must maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program.
- (5) Records to document use of binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by § 63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.
- (6) Records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provides information on the binder or coating materials used.
  - (7) Records of metal melt production for each calendar year.
- (f) (g) [Paragraphs 63.10890(f) and (g) are printed under REPORTING REQUIREMENTS in this section of permit.]
- (h) [Paragraph 63.10890(h) is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (i) [Paragraph 63.10890(i) is printed under REPORTING REQUIREMENTS in this section of permit.]

[Source: 73 FR 252, Jan. 2, 2008]

### V. REPORTING REQUIREMENTS.

### # 014 [25 Pa. Code §135.21]

### **Emission statements**

- (a) Except as provided in subsection (d), this section applies to stationary sources or facilities:
  - (1) Not applicable.
- (2) Not located in an area described in paragraph (1) and included in the Northeast Ozone Transport Region which emit or have the potential to emit 100 tons or more of oxides of nitrogen or 50 tons or more of VOC per year.
- (b) The owner or operator of each stationary source emitting oxides of nitrogen or VOCs 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.

- (c) 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.
- (d) Subsection (a) does not apply to a class or category of stationary sources which emits less than 25 tons per year of VOCs or oxides of nitrogen, if the Department in its submissions to the Administrator of the EPA under section 182(a)(1) or (3)(B)(ii) of the Clean Air Act (42 U.S.C.A. § 7511a(a)(1) or (3)(B)(ii)) provides an inventory of emissions from the class or category of sources based on the use of the emission factors established by the Administrator or other methods acceptable to the Administrator. The Department will publish in the Pennsylvania Bulletin a notice of the lists of classes or categories of sources which are exempt from the emission statement requirement under this subsection.

### # 015 [25 Pa. Code §135.3] Reporting

- (a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, 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.

## # 016 [25 Pa. Code §135.4]

### Report format

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

### # 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10881]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my compliance dates?

- (a) [Paragraph 63.10881(a) is a one-time requirement which has already been met.]
- (b) (c) [Not applicable]
- (d) Following the initial determination for an existing affected source required in § 63.10880(f),
- (1) Beginning January 1, 2010, if the annual metal melt production of your small foundry exceeds 20,000 tons during the preceding calendar year, you must submit a notification of foundry reclassification to the Administrator within 30 days and comply with the requirements in paragraphs (d)(1)(i) or (ii) of this section, as applicable.
  - (i) [Not applicable]
  - (ii) If your small foundry had previously been classified as a large foundry, you must comply with the requirements



for a large foundry no later than the date of your foundry's most recent notification that the annual metal melt production exceeded 20,000 tons.

- (2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry, even if your annual metal melt production falls below 20,000 tons. After 3 years, you may reclassify your facility as a small foundry provided your annual metal melt production for the preceding calendar year was 20,000 tons or less. If you reclassify your large foundry as a small foundry, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a small foundry no later than the date you notify the Administrator of the reclassification to the Administrator within 30 days and comply with the requirements for a large foundry no later than the date you notify the Administrator of the reclassification.
- (e) Following the initial determination for a new affected source required in §63.10880(g),
- (1) If you increase the annual metal melt capacity of your small foundry to exceed 10,000 tons, you must submit a notification of reclassification to the Administrator within 30 days and comply with the requirements for a large foundry no later than the startup date for the new equipment, if applicable, or the date of issuance for your revised State or Federal operating permit.
- (2) If your facility is initially classified as a large foundry (or your small foundry subsequently becomes a large foundry), you must comply with the requirements for a large foundry for at least 3 years before reclassifying your facility as a small foundry. After 3 years, you may reclassify your facility as a small foundry provided your most recent annual metal melt capacity is 10,000 tons or less. If you reclassify your large foundry as a small foundry, you must notify the Administrator within 30 days and comply with the requirements for a small foundry no later than the date your melting equipment was removed or taken out of service, if applicable, or the date of issuance for your revised State or Federal operating permit.

### # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10890]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my management practices and compliance requirements?

- (a) [Paragraph 63.10890(a) is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (b) (c) [Initial Notification and Notification of Compliance Status are one-time requirements which were already met with Zurn's submissions on Dec. 23, 2008; Apr. 12, 2010; and Sep. 14, 2011.]
- (d) (e) [Paragraphs 63.10890(d) and (e) are printed under RECORDKEEPING REQUIREMENTS in this section of permit.]
- (f) [Not applicable]
- (g) You must submit a written notification to the Administrator of the initial classification of your facility as a small foundry as required in § 63.10880(f) as applicable, and for any subsequent reclassification as required in § 63.10881(d)(1) as applicable. [Non-applicable text referring to New sources is omitted from this paragraph.]
- (h) [Paragraph 63.10890(h) is printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (i) You must comply with the following requirements of the General Provisions (40 CFR part 63, subpart A): §§ 63.1 through 63.5; § 63.6(a), (b), (c), and (e)(1); § 63.9; § 63.10(a), (b)(1), (b)(2)(xiv), (b)(3), (d)(1), (d)(4), and (f); and §§ 63.13 through 63.16. Requirements of the General Provisions not cited in the preceding sentence do not apply to the owner or operator of a new or existing affected source that is classified as a small foundry.

[Source: 73 FR 252, Jan. 2, 2008]

# 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13]

**Subpart A--General Provisions** 

Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part





shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices. [Non-Pennsylvania Regions omitted from this permit section.]

EPA Region III Director Air Protection Division 1650 Arch Street Philadelphia, PA 19103.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(I) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

[Address of State agency for submittals follows.]

Bureau of Air Quality
Department of Environmental Protection
230 Chestnut Street
Meadville, PA 16335

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 66061, Dec. 1, 1998; 67 FR 4184, Jan. 29, 2002; 68 FR 32601, May 30, 2003; 68 FR 35792, June 17, 2003; 73 FR 24871, May 6, 2008; 75 FR 69532, Nov. 12, 2010; 76 FR 49673, Aug. 11, 2011]

### VI. WORK PRACTICE REQUIREMENTS.

### # 020 [25 Pa. Code §123.1]

### Prohibition of certain fugitive emissions

A person responsible for any source specified in Section C, Condition #001 shall take all reasonable actions to prevent particulate matter 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 by trucking or earth moving equipment, erosion by water, or other means.

### # 021 [25 Pa. Code §129.14]

### **Open burning operations**

- (a) Air basins. No person may permit the open burning of material in an air basin.
- (b) Outside of air basins. Not applicable.
- (c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
  - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.



- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) (5) Not applicable.
- (6) A fire set solely for recreational or ceremonial purposes.
- (7) A fire set solely for cooking food.

This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act, 35 P.S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.

### # 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10885]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my management practices for metallic scrap and mercury switches?

(a) Metallic scrap management program. For each segregated metallic scrap storage area, bin or pile, you must comply with the materials acquisition requirements in paragraph (a)(1) or (2) of this section. You must keep a copy of the material specifications onsite and readily available to all personnel with material acquisition duties, and provide a copy to each of your scrap providers. You may have certain scrap subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section at your facility provided the metallic scrap remains segregated until charge make-up.

[Note: The Department received a copy of Zurn's Metallic Scrap Management Program dated 12/23/08.]

- (1) Restricted metallic scrap. You must prepare and operate at all times according to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. For the purpose of this subpart, "free liquids" is defined as material that fails the paint filter test by EPA Method 9095B, "Paint Filter Liquids Test" (revision 2), November 2004 (incorporated by reference—see § 63.14). The requirements for no free liquids do not apply if the owner or operator can demonstrate that the free liquid is water that resulted from scrap exposure to rain.
- (2) General iron and steel scrap. You must prepare and operate at all times according to written material specifications for the purchase and use of only iron and steel scrap that has been depleted (to the extent practicable) of organics and HAP metals in the charge materials used by the iron and steel foundry. The materials specifications must include at minimum the information specified in paragraph (a)(2)(i) or (ii) of this section.
- (i) Except as provided in paragraph (a)(2)(ii) of this section, specifications for metallic scrap materials charged to a scrap preheater or metal melting furnace to be depleted (to the extent practicable) of the presence of used oil filters, chlorinated plastic parts, accessible lead-containing components (such as batteries and wheel weights), and a program to ensure the scrap materials are drained of free liquids.
  - (ii) [Not applicable]
- (b) Mercury requirements. For scrap containing motor vehicle scrap, you must procure the scrap pursuant to one of the compliance options in paragraphs (b)(1), (2), or (3) of this section for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, you must procure the scrap pursuant to the requirements in paragraph (b)(4) of this section for each scrap provider, contract, or shipment. You may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

[Note: Zurn indicated in their September 14, 2011, letter of Compliance Status that they are complying with paragraph (b)(3) of this section.]

- (1) Site-specific plan for mercury switches. You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.
- (i) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.



- (ii) You must prepare and operate according to a plan demonstrating how your facility will implement the scrap specification in paragraph (b)(1)(i) of this section for removal of mercury switches. You must submit the plan to the Administrator for approval. You must operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the Administrator or delegated authority within 60 days following disapproval of a plan. You may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Administrator or delegated authority. The Administrator or delegated authority may change the approval status of the plan upon 90-days written notice based upon the semiannual report or other information. The plan must include:
- (A) A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from the scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;
- (B) Provisions for obtaining assurance from scrap providers motor vehicle scrap provided to the facility meet the scrap specification;
- (C) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and
- (D) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in paragraph (b)(1)(ii)(C) of this section).
- (iii) You must require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator may request documentation or additional information at any time.
- (iv) You must establish a goal for each scrap supplier to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under paragraph (b)(1) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.
- (v) For each scrap provider, you must submit semiannual progress reports to the Administrator that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in paragraph (b)(1)(ii)(A) of this section. This information can be submitted in aggregate form and does not have to be submitted for each shipment. The Administrator may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.
- (2) Option for approved mercury programs. You must certify in your notification of compliance status that you participate in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. If you purchase motor vehicle scrap from a broker, you must certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in paragraphs (b)(2)(i) through (iii) of this section. The National Mercury Switch Recovery Program and the State of Maine Mercury Switch Removal Program are EPA-approved programs under paragraph (b)(2) of this section unless and until the Administrator disapproves the program (in part or in whole) under



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paragraph (b)(2)(iii) of this section.

- (i) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;
- (ii) The program has a goal to remove at least 80 percent of mercury switches from motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and
- (iii) The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.
- (iv) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.
- (A) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.
- (B) You must provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal or mercury switches from end-of-life vehicles. Upon the request of the Administrator or delegated authority, you must provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.
- (C) You must conduct periodic inspections or other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.
- (3) Option for specialty metal scrap. You must certify in your notification of compliance status and maintain records of documentation that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.
- (4) Scrap that does not contain motor vehicle scrap. For scrap not subject to the requirements in paragraphs (b)(1) through (3) of this section, you must certify in your notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10886]

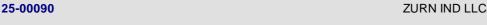
Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my management practices for binder formulations

For each furfuryl alcohol warm box mold or core making line at a new or existing iron and steel foundry, you must use a binder chemical formulation that does not use methanol as a specific ingredient of the catalyst formulation. This requirement does not apply to the resin portion of the binder system.

### # 024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10890]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my management practices and compliance requirements?





- (a) You must comply with the pollution prevention management practices for metallic scrap and mercury switches in § 63.10885 and binder formulations in § 63.10886.
- (b) (c) [Paragraphs 63.10890(b) and (c) are printed under REPORTING REQUIREMENTS in this section of permit.]
- (d) (e) [Paragraphs 63.10890(d) and (e) are printed under RECORDKEEPING REQUIREMENTS in this section of permit.]
- (f) (g) [Paragraphs 63.10890(f) and (g) are printed under REPORTING REQUIREMENTS in this section of permit.]
- (h) Following the initial determination for an existing affected source as a small foundry, if the annual metal melt production exceeds 20,000 tons during the preceding year, you must comply with the requirements for large foundries by the applicable dates in § 63.10881(d)(1)(i) or (d)(1)(ii). [Omitted from this paragraph is Non-applicable text referring to New sources and text referring to non-applicable §63.10881(d)(1)(i).]
- (i) [Paragraph 63.10890(i) is printed under REPORTING REQUIREMENTS in this section of permit.]

[Source: 73 FR 252, Jan. 2, 2008]

### ADDITIONAL REQUIREMENTS.

# 025 [25 Pa. Code §121.7]

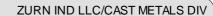
Prohibition of air pollution.

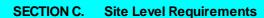
No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P. S. § \$ 4001—4015).

[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10880]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate an iron and steel foundry that is an area source of hazardous air pollutant (HAP) emissions.
- (b) This subpart applies to each new or existing affected source. The affected source is each iron and steel foundry.
- (1) An affected source is existing if you commenced construction or reconstruction of the affected source before September 17, 2007.
- (2) An affected source is new if you commenced construction or reconstruction of the affected source on or after September 17, 2007. If an affected source is not new pursuant to the preceding sentence, it is not new as a result of a change in its compliance obligations pursuant to §63.10881(d).
- (c) On and after January 2, 2008, if your iron and steel foundry becomes a major source as defined in §63.2, you must meet the requirements of 40 CFR part 63, subpart EEEEE.
- (d) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act.
- (e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.
- (f) If you own or operate an existing affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's metal melt production for calendar year 2008. If the metal melt production for calendar year 2008 is 20,000 tons or less, your area source is a small foundry. If your metal melt production for calendar year 2008 is greater than 20,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than January 2, 2009.
- (g) If you own or operate a new affected source, you must determine the initial applicability of the requirements of this subpart to a small foundry or a large foundry based on your facility's annual metal melting capacity at startup. If the annual





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metal melting capacity is 10,000 tons or less, your area source is a small foundry. If the annual metal melting capacity is greater than 10,000 tons, your area source is a large foundry. You must submit a written notification to the Administrator that identifies your area source as a small foundry or a large foundry no later than 120 days after startup.

### # 027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10905]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (6) of this section.
- (1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g).
- (2) Approval of an alternative opacity emissions standard under §63.6(h)(9).
- (3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f). A "major change to test method" is defined in §63.90.
- (4) Approval of a major change to monitoring under §63.8(f). A "major change to monitoring" under is defined in §63.90.
- (5) Approval of a major change to recordkeeping and reporting under §63.10(f). A "major change to recordkeeping/reporting" is defined in §63.90.
- (6) Approval of a local, State, or national mercury switch removal program under §63.10885(b)(2).

### # 028 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10906]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What definitions apply to this subpart?

Foundry operations mean all process equipment and practices used to produce metal castings for shipment. Foundry operations include: Mold or core making and coating; scrap handling and preheating; metal melting and inoculation; pouring, cooling, and shakeout; shotblasting, grinding, and other metal finishing operations; and sand handling.

Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities, operations that only produce non-commercial castings, and operations associated with nonferrous metal production are not included in this definition.

[Source: 73 FR 252, Jan. 2, 2008]

[See regulation for remaining definitions applicable to this subpart.]

### VIII. COMPLIANCE CERTIFICATION.

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

### IX. COMPLIANCE SCHEDULE.





No compliance milestones exist.





Source ID: 102 Source Name: MOLDING, POURING, COOLING

Source Capacity/Throughput: 14.000 Tons/HR COOLED CASTINGS

14.000 Tons/HR MOLTEN IRON

14.000 Tons/HR POURED CASTINGS



### I. RESTRICTIONS.

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

### # 001 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

- (a) The PM emissions from the exhaust stream of the baghouse shall not exceed 0.02 grain per dry standard cubic foot as stated in the application.
- (b) The PM-10 emission rate from the exhaust stream of the baghouse shall not exceed 5.25 pounds per hour and 23.0 tons per year (based on a 12-month rolling total) as stated in the application and based on a throughput of 122,571 tons of metal melted per year.

[From Condition #001 of Plan Appproval 25-090E]

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The facility shall perform weekly preventative maintenance inspections of the fabric collector, and check the pressure drop across the collector at least once each day.

[From Condition #002 of Plan Appproval 25-090E]

### IV. RECORDKEEPING REQUIREMENTS.

### # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) The facility shall maintain a log of all preventative maintenance inspections of the collector.
- (b) The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them, and the measured pressure drop across the fabric collector.
- (c) PM emission totals will be calculated on a monthly basis based on throughput for the month. The current monthly total will be added to the total from the previous eleven (11) months to form a twelve month rolling total.

[From Condition #003 of Plan Appproval 25-090E]





### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

#### # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) A magnehelic gauge shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the collector.

[From Condition #8 of Plan Approval # PA-25-090A]

(b) Twenty percent of the total number of bags in the baghouse is required to be on hand (165 bags).

[From Condition #9 of Plan Approval # PA-25-090A] [The baghouse (C102) holds 832 fabric filters.]

(c) The facility shall maintain the fabric collector in accordance with the manufacturer's specifications and consistent with good air pollution control practices.

### VII. ADDITIONAL REQUIREMENTS.

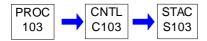
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).



Source ID: 103 Source Name: SAND HAND, MOLD, POUR, COOL, SHAKEOUT

Source Capacity/Throughput: 14.000 Tons/HR IRON CASTINGS

14.000 Tons/HR POURED CASTINGS
14.000 Tons/HR COOLED CASTINGS
14.000 Tons/HR FOUNDRY SAND



### 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 source, at any time, either in excess of the rate calculated by the formula below or in such a manner that the concentration of particulate matter in the effluent gas exceeds .02 grains per dry standard cubic foot, whichever is greater:

Formula

 $A = .76E^{(0.42)}$ 

where:

A = Allowable emissions in pounds per hour.

 $E = Emission index = F \times W$  pounds per hour.

F = 20 (sand) in pounds per ton.

W = Production or charging rate in units per hour.

The units for F and W shall be compatible.

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

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

### IV. RECORDKEEPING REQUIREMENTS.

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

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

# 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

A magnehelic gauge or equivalent shall be installed and maintained at a conveniently readable location to indicate





pressure drop across the collector.

### VII. ADDITIONAL REQUIREMENTS.

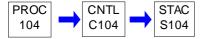
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).





Source ID: 104 Source Name: CASTING CLEANING

Source Capacity/Throughput: 14.000 Tons/HR CLEANED CASTINGS



### 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 source, at any time, in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

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

### IV. RECORDKEEPING REQUIREMENTS.

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

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) A magnehelic gauge or equivalent shall be installed and maintained at a conveniently readable location to indicate pressure drop across the collector.

[From Condition #4 of Plan Approval # 25-304-034]

(b) At least 20% of the total number of bags installed in the collector shall be kept in the inventory for emergency bag replacement. [Note: The Mikro-Pulsaire model 360-S-12-TRH dust collector holds 360 bags; twenty percent spares = 72 bags.]

[From Condition #5 of Plan Approval # 25-304-034]

### VII. ADDITIONAL REQUIREMENTS.

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

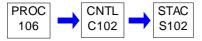






Source ID: 106 Source Name: CLEANING MACHINE (WHEELABRATOR)

> Source Capacity/Throughput: 500.000 Lbs/HR CLEANED CASTINGS



### RESTRICTIONS.

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

# 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The PM emissions from the exhaust stream of C102 shall not exceed 0.02 grain per dry standard cubic foot.

[From Condition #001 of Plan Appproval 25-090E]

### II. TESTING REQUIREMENTS.

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

#### III. MONITORING REQUIREMENTS.

# 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The facility shall perform weekly preventative maintenance inspections of C102, and check the pressure drop across C102 at least once each day.

[From Condition #002 of Plan Appproval 25-090E]

### IV. RECORDKEEPING REQUIREMENTS.

# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) The facility shall maintain a log of all preventative maintenance inspections of C102.
- b) Inspections logs, at a minum, shall contain the dates of inspections, potential problems or defects that were encountered, steps taken to correct them and the measured pressure drop across C102.

[From Condition #003 of Plan Appproval 25-090E]

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

# 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- a) A magnehelic gauge shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across C102.
- b) Twenty percent of the total number of bags in C102 are required to be on hand (165 bags).
- c) The facility will operate control device C102 when this source is in operation.





d) The facility will operate this source/control device in accordance with manufacturer's specifications and using good air pollution control practices.

[From Condition #004 of Plan Appproval 25-090E]

### VII. ADDITIONAL REQUIREMENTS.

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



Source ID: 108 Source Name: NATURAL GAS USAGE FROM SHAKEOUT

Source Capacity/Throughput: 5.000 MCF/HR Natural Gas



### I. RESTRICTIONS.

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

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

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

### IV. RECORDKEEPING REQUIREMENTS.

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

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

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

### VII. ADDITIONAL REQUIREMENTS.

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



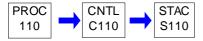
SECTION D.



Source Level Requirements

Source ID: 110 Source Name: ELECTRIC INDUCTION MELT FURNACES (4)

Source Capacity/Throughput: 14.000 Tons/HR MOLTEN IRON



This source occurs in alternate operation LARGE FOUNDRY OPERATING REQUIREMENTS

### I. RESTRICTIONS.

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

# 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall limit PM emissions from control device C110 (ETA2000 Baghouse) to 0.005 grains per dry standard cubic feet, 0.644 pounds per hour, and 2.82 tons per year (based on a 12 month rolling total). These emissions have been arrived at using a throughput of 122,571 tons of metal melted per year.

[This condition streamlines out the 25 Pa. Code §123.13(b) limits.]

### **Throughput Restriction(s).**

# 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Source 110 (Inductotherm Induction Furnaces) maximum throughput shall not exceed 14 tons per hour of metal charged.

[Source: Plan approval 25-090D, Section D, Source 110, Condition 002(b)]

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

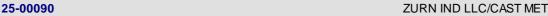
# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

- (a) A manometer, or equivalent device, shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the baghouse.
- (b) The permittee shall maintain an operating pressure drop range of 1 to 9 inches of water column across the baghouse.
- (c) The permittee shall perform weekly preventative maintenance inspections of the furnaces and baghouse (at a minimum), and check the pressure drop across the baghouse at least once each day.
- (d) The permittee shall install, operate, and maintain a manometer or similar device to measure the pressure drop across the control device. All gauges employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (+/- 2%) of full scale reading.
- (e) The permittee shall operate the control device at all times that the source is in operation.
- (f) The permittee shall maintain and operate the furnaces and baghouse in accordance with manufacturers specifications and in accordance with good air pollution control practices.

[Source: Plan approval 25-090D, Section D, Source 110, Condition 010]







### IV. RECORDKEEPING REQUIREMENTS.

# 004 [25 Pa. Code §127.12b] Plan approval terms and conditions.

- (a) The permittee shall record the charge rate of the electric induction furnaces during all hours of operation.
- (b) PM emission totals will be calculated on a monthly basis based on throughput for the month. The current monthly total will be added to the total from the previous eleven (11) months to form a twelve month rolling total.

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

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

### VII. ADDITIONAL REQUIREMENTS.

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



SECTION D.

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### **Source Level Requirements**

Source ID: 112 Source Name: REFRACTORY TORCHES

Source Capacity/Throughput: 0.600 MCF/HR REFRACTORY HEATER

PROC STAC Z112

### I. RESTRICTIONS.

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

### II. TESTING REQUIREMENTS.

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

### III. MONITORING REQUIREMENTS.

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

### IV. RECORDKEEPING REQUIREMENTS.

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

### V. REPORTING REQUIREMENTS.

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

### VI. WORK PRACTICE REQUIREMENTS.

# 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The facility shall operate and maintain this source in accordance with manufacturer's specifications and consistent with good air pollution control practices.

[From Condition #001 of Plan Appproval 25-090E]

### VII. ADDITIONAL REQUIREMENTS.

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



Alternative Operation Name: LARGE FOUNDRY OPERATING REQUIREMENTS

## #001 CHANGES FROM NORMAL OPERATION

Should Zurn Industries LLC melt greater than or equal to 20,000 tons of metal during any consecutive 12 month rolling period, the facility shall be designated as a "Large Foundry" with regard to 40 CFR Part 63 Subpart ZZZZZ (5Z) (National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources) requirements. The facility will be then subject to the requirements of this alternative operating scenario.

# Sources included in this Alternative Operation:

ID	Name	Source Type
110	ELECTRIC INDUCTION MELT FURNACES (4)	Process

## I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10895]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my standards and management practices?

- (a) (b) [Paragraphs 63.10895(a) and (b) of the regulation are printed under WORK PRACTICE REQUIREMENTS in this section of permit.]
- (c) You must not discharge to the atmosphere emissions from any metal melting furnace or group of all metal melting furnaces that exceed the applicable limit in paragraph (c)(1) or (2) of this section. When an alternative emissions limit is provided for a given emissions source, you are not restricted in the selection of which applicable alternative emissions limit is used to demonstrate compliance.
- (1) For an existing iron and steel foundry, 0.8 pounds of particulate matter (PM) per ton of metal charged or 0.06 pounds of total metal HAP per ton of metal charged. [Compliance with the more stringent emission limit of 0.005 grains/dscf of Plan Approval 25-090D, in Condition # 002(a) of Section D of that plan approval, assures compliance with this emission limit.]
  - (2) [Not applicable]
- (d) [Not applicable]
- (e) If you own or operate a new or existing iron and steel foundry, you must not discharge to the atmosphere fugitive emissions from foundry operations that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 30 percent.

## II. TESTING REQUIREMENTS.

# # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10898]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my performance test requirements?

- (a) [This one-time requirement for initial testing was met as evidenced in the September 14, 2011, letter of Compliance Status submitted by the facility.]
- (b) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP emissions limits in §63.10895(c) for a metal melting furnace or group of all metal melting furnaces no less frequently than every 5 years and each time you elect to change an operating limit or make a process change likely to increase HAP emissions.
- (c) You must conduct each performance test according to the requirements in §63.7(e)(1), Table 1 to this subpart, and paragraphs (d) through (g) of this section.
- (d) To determine compliance with the applicable PM or total metal HAP emissions limit in §63.10895(c) for a metal melting furnace in a lb/ton of metal charged format, compute the process-weighted mass emissions (Ep) for each test run using



Equation 1 of this section:

Where:

Ep = Process-weighted mass emissions rate of PM or total metal HAP, pounds of PM or total metal HAP per ton (lb/ton) of metal charged;

- C = Concentration of PM or total metal HAP measured during performance test run, grains per dry standard cubic foot (gr/dscf);
  - Q = Volumetric flow rate of exhaust gas, dry standard cubic feet per hour (dscf/hr);
  - T = Total time during a test run that a sample is withdrawn from the stack during melt production cycle, hr;
  - P = Total amount of metal charged during the test run, tons; and
  - K = Conversion factor, 7,000 grains per pound.
- (e) To determine compliance with the applicable emissions limit in §63.10895(c) for a group of all metal melting furnaces using emissions averaging,
- (1) Determine and record the monthly average charge rate for each metal melting furnace at your iron and steel foundry for the previous calendar month; and
  - (2) Compute the mass-weighted PM or total metal HAP using Equation 2 of this section.

[See 40 CFR §63.10898(e) for equation 2.]

Where:

Ec = The mass-weighted PM or total metal HAP emissions for the group of all metal melting furnaces at the foundry, pounds of PM or total metal HAP per ton of metal charged;

Epi = Process-weighted mass emissions of PM or total metal HAP for individual emission unit i as determined from the performance test and calculated using Equation 1 of this section, pounds of PM or total metal HAP per ton of metal charged;

Tti = Total tons of metal charged for individual emission unit i for the calendar month prior to the performance test, tons; and

n = The total number of metal melting furnaces at the iron and steel foundry.

- (3) [Not applicable]
- (f) [Not applicable]
- (g) To determine compliance with an emissions limit for situations when multiple sources are controlled by a single control device, but only one source operates at a time or other situations that are not expressly considered in paragraphs (d) through (f) of this section, you must submit a site-specific test plan to the Administrator for approval according to the requirements in §63.7(c)(2) and (3).
- (h) You must conduct each opacity test for fugitive emissions according to the requirements in §63.6(h)(5) and Table 1 to



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# SECTION E. Alternative Operation Requirements.

this subpart.

- (i) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.10895(e) no less frequently than every 6 months and each time you make a process change likely to increase fugitive emissions.
- (j) In your performance test report, you must certify that the capture system operated normally during the performance test.
- (k) [Not applicable]
- (I) You may change the operating limits for a wet scrubber, electrostatic precipitator, or baghouse if you meet the requirements in paragraphs (I)(1) through (3) of this section.
- (1) Submit a written notification to the Administrator of your plan to conduct a new performance test to revise the operating limit.
  - (2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.10895(c).
  - (3) [Not applicable]

## III. MONITORING REQUIREMENTS.

## # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10897] Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my monitoring requirements?

- (a) You must conduct an initial inspection of each PM control device for a metal melting furnace at an existing affected source. You must conduct each initial inspection no later than 60 days after your applicable compliance date for each installed control device which has been operated within 60 days of the compliance date. For an installed control device which has not operated within 60 days of the compliance date, you must conduct an initial inspection prior to startup of the control device. Following the initial inspections, you must perform periodic inspections and maintenance of each PM control device for a metal melting furnace at an existing affected source. You must perform the initial and periodic inspections according to the requirements in paragraphs (a)(1) through (4) of this section. You must record the results of each initial and periodic inspection and any maintenance action in the logbook required in §63.10899(b)(13).
- (1) For the initial inspection of each baghouse, you must visually inspect the system ductwork and baghouse units for leaks. You must also inspect the inside of each baghouse for structural integrity and fabric filter condition. Following the initial inspections, you must inspect and maintain each baghouse according to the requirements in paragraphs (a)(1)(i) and (ii) of this section.

[Note: Installation, operation and maintenance of a bag leak detection system may be used as an alternative to this inspection in accordance with paragraph (d) below.]

- (i) You must conduct monthly visual inspections of the system ductwork for leaks.
- (ii) You must conduct inspections of the interior of the baghouse for structural integrity and to determine the condition of the fabric filter every 6 months.
  - (2) (4) [Not applicable]
- (b) (c) [Not applicable]
- (d) If you own or operate an existing affected source, you may install, operate, and maintain a bag leak detection system for each negative pressure baghouse or positive pressure baghouse as an alternative to the baghouse inspection requirements in paragraph (a)(1) of this section. [Non-applicable text pertaining to New sources is omitted from this paragraph.] You must install, operate, and maintain each bag leak detection system according to the requirements in paragraphs (d)(1) through (3) of this section.



- (1) Each bag leak detection system must meet the requirements in paragraphs (d)(1)(i) through (vii) of this section.
- (i) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.00044 grains per actual cubic foot) or less.
- (ii) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using a strip chart recorder, data logger, or other means.
- (iii) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.
- (iv) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points. If the system is equipped with an alarm delay time feature, you also must adjust the alarm delay time.
- (v) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the monitoring plan required by paragraph (d)(2) of this section.
  - (vi) Not applicable.
  - (vii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.
- (2) You must prepare a site-specific monitoring plan for each bag leak detection system to be incorporated in your O&M plan. You must operate and maintain each bag leak detection system according to the plan at all times. Each plan must address all of the items identified in paragraphs (d)(2)(i) through (vi) of this section.
  - (i) Installation of the bag leak detection system.
- (ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.
  - (iii) Operation of the bag leak detection system including quality assurance procedures.
- (iv) Maintenance of the bag leak detection system including a routine maintenance schedule and spare parts inventory list.
  - (v) How the bag leak detection system output will be recorded and stored.
- (vi) Procedures for determining what corrective actions are necessary in the event of a bag leak detection alarm as required in paragraph (d)(3) of this section.
- (3) In the event that a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete corrective action as soon as practicable, but no later than 10 calendar days from the date of the alarm. You must record the date and time of each valid alarm, the time you initiated corrective action, the correction action taken, and the date on which corrective action was completed. Corrective actions may include, but are not limited to:
- (i) Inspecting the bag house for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
  - (ii) Sealing off defective bags or filter media.
  - (iii) Replacing defective bags or filter media or otherwise repairing the control device.



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# SECTION E. Alternative Operation Requirements.

- (iv) Sealing off a defective baghouse department.
- (v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
- (vi) Shutting down the process producing the particulate emissions.
- (e) You must make monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). You must repair any defect or deficiency in the capture system as soon as practicable, but no later than 90 days. You must record the date and results of each inspection and the date of repair of any defect or deficiency.
- (f) You must install, operate, and maintain each CPMS or other measurement device according to your O&M plan. You must record all information needed to document conformance with these requirements.
- (g) In the event of an exceedance of an established emissions limitation (including an operating limit), you must restore operation of the emissions source (including the control device and associated capture system) to its normal or usual manner or operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the exceedance. You must record the date and time correction action was initiated, the correction action taken, and the date corrective action was completed.
- (h) If you choose to comply with an emissions limit in § 63.10895(c) using emissions averaging, you must calculate and record for each calendar month the pounds of PM or total metal HAP per ton of metal melted from the group of all metal melting furnaces at your foundry. You must calculate and record the weighted average pounds per ton emissions rate for the group of all metal melting furnaces at the foundry determined from the performance test procedures in § 63.10898(d) and (e).

# IV. RECORDKEEPING REQUIREMENTS.

## # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10899] Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

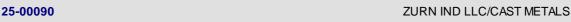
What are my recordkeeping and reporting requirements?

- (a) As required by §63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.
- (b) In addition to the records required by 40 CFR 63.10, you must keep records of the information specified in paragraphs (b)(1) through (13) of this section.
- (1) You must keep records of your written materials specifications according to §63.10885(a) and records that demonstrate compliance with the requirements for restricted metallic scrap in §63.10885(a)(1) and/or for the use of general scrap in §63.10885(a)(2) and for mercury in §63.10885(b)(1) through (3), as applicable. You must keep records documenting compliance with §63.10885(b)(4) for scrap that does not contain motor vehicle scrap.
  - (2) If you are subject to the requirements for a site-specific plan for mercury under §63.10885(b)(1), you must:
- (i) Maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered: and
  - (ii) Submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from



the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that you have conducted periodic inspections or taken other means of corroboration as required under §63.10885(b)(1)(ii)(C). You must identify which option in §63.10885(b) applies to each scrap provider, contract, or shipment. You may include this information in the semiannual compliance reports required under paragraph (c) of this section.

- (3) If you are subject to the option for approved mercury programs under §63.10885(b)(2), you must maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If your scrap provider is a broker, you must maintain records identifying each of the broker's scrap suppliers and documenting the scrap supplier's participation in an approved mercury switch removal program.
- (4) You must keep records to document use of any binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation for each furfuryl alcohol warm box mold or core making line as required by §63.10886. These records must be the Material Safety Data Sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet.
- (5) You must keep records of the annual quantity and composition of each HAP-containing chemical binder or coating material used to make molds and cores. These records must be copies of purchasing records, Material Safety Data Sheets, or other documentation that provide information on the binder or coating materials used.
  - (6) You must keep records of monthly metal melt production for each calendar year.
- (7) You must keep a copy of the operation and maintenance plan as required by §63.10896(a) and records that demonstrate compliance with plan requirements.
- (8) If you use emissions averaging, you must keep records of the monthly metal melting rate for each furnace at your iron and steel foundry, and records of the calculated pounds of PM or total metal HAP per ton of metal melted for the group of all metal melting furnaces required by §63.10897(h).
  - (9) If applicable, you must keep records for bag leak detection systems as follows:
    - (i) Records of the bag leak detection system output;
- (ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and
- (iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.
  - (10) You must keep records of capture system inspections and repairs as required by §63.10897(e).
- (11) You must keep records demonstrating conformance with your specifications for the operation of CPMS as required by §63.10897(f).
  - (12) You must keep records of corrective action(s) for exceedances and excursions as required by §63.10897(g).
- (13) You must record the results of each inspection and maintenance required by §63.10897(a) for PM control devices in a logbook (written or electronic format). You must keep the logbook onsite and make the logbook available to the Administrator upon request. You must keep records of the information specified in paragraphs (b)(13)(i) through (iii) of this section.
- (i) The date and time of each recorded action for a fabric filter, the results of each inspection, and the results of any maintenance performed on the bag filters.
  - (ii) (iii) [Not applicable]



(c) - (d) [Paragraphs 63.10899(c) and (d) are printed under REPORTING REQUIREMENTS in this section of permit.]

## V. REPORTING REQUIREMENTS.

#### # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10899]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my recordkeeping and reporting requirements?

[This condition applies to 'Large' foundries as specified in 63.10895(a).]

- (a) (b) [Paragraphs (a) and (b) are printed under RECORDKEEPING REQUIREMENTS in this section of permit.]
- (c) [Not applicable]
- (d) You must submit written notification to the Administrator of the initial classification of your new or existing affected source as a large iron and steel facility as required in §63.10880(f) and (g), as applicable, and for any subsequent reclassification as required in §63.10881(d) or (e), as applicable.

## [Note:

63.10880(f) was a one-time requirement of initial notification which was already met.

63.10880(q) is not applicable because it applies to new sources and these sources are existing.

63.10881(d) may be applicable and is included under REPORTING REQUIREMENTS in this section of permit.

63.10881(e) is not applicable because it applies to new sources and these sources are existing.]

[Source: 73 FR 252, Jan. 2, 2008]

#### # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10900]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What parts of the General Provisions apply to my large foundry?

- (a) [Paragraph 63.10900(a) is printed under ADDITIONAL REQUIREMENTS in this section of permit.]
- (b) If you own or operator a new or existing affected source that is classified as a large foundry, your notification of compliance status required by §63.9(h) must include each applicable certification of compliance, signed by a responsible official, in Table 4 of this subpart. [See regulation for Table 4 of 40 CFR Part 63 Subpart ZZZZZ.]

[Source: 73 FR 252, Jan. 2, 2008]

## VI. WORK PRACTICE REQUIREMENTS.

#### # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10895]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my standards and management practices?

- (a) If you own or operate an affected source that is a large foundry as defined in § 63.10906, you must comply with the pollution prevention management practices in §§ 63.10885 and 63.10886, the requirements in paragraphs (b) through (e) of this section, and the requirements in §§ 63.10896 through 63.10900.
- (b) You must operate a capture and collection system for each metal melting furnace at a new or existing iron and steel foundry unless that furnace is specifically uncontrolled as part of an emissions averaging group. Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.
- (c) [Paragraph §63.10895(c) is printed under EMISSION RESTRICTIONS in this section of permit.]
- (d) [Not applicable]
- (e) [Paragraph §63.10895(e) is printed under EMISSION RESTRICTIONS in this section of permit.]



## # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10896]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What are my operation and maintenance requirements?

- (a) You must prepare and operate at all times according to a written operation and maintenance (O&M) plan for each control device for an emissions source subject to a PM, metal HAP, or opacity emissions limit in §63.10895. You must maintain a copy of the O&M plan at the facility and make it available for review upon request. At a minimum, each plan must contain the following information:
  - (1) General facility and contact information;
- (2) Positions responsible for inspecting, maintaining, and repairing emissions control devices which are used to comply with this subpart;
- (3) Description of items, equipment, and conditions that will be inspected, including an inspection schedule for the items, equipment, and conditions. For baghouses that are equipped with bag leak detection systems, the O&M plan must include the site-specific monitoring plan required in §63.10897(d)(2).
  - (4) Identity and estimated quantity of the replacement parts that will be maintained in inventory; and
  - (5) [Not applicable]
- (b) You may use any other O&M, preventative maintenance, or similar plan which addresses the requirements in paragraph (a)(1) through (5) of this section to demonstrate compliance with the requirements for an O&M plan.

# VII. ADDITIONAL REQUIREMENTS.

# # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZZ Table 1] Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources Performance Test Requirements for New and Existing Affected Sources Classified as Large Foundries

Table 1 to Subpart ZZZZZ of Part 63—Performance Test Requirements for New and Existing Affected Sources Classified as Large Foundries

As required in §63.10898(c) and (h), you must conduct performance tests according to the test methods and procedures in the following table:

- 1. Each metal melting furnace subject to a PM or total metal HAP limit in §63.10895(c)
- a. Select sampling port locations and the number of traverse points in each stack or duct using EPA Method 1 or 1A (40 CFR part 60, appendix A)
  - b. Determine volumetric flow rate of the stack gas using Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A)
  - c. Determine dry molecular weight of the stack gas using EPA Method 3, 3A, or 3B (40 CFR part 60, appendix A).1
  - d. Measure moisture content of the stack gas using EPA Method 4 (40 CFR part 60, A)
- e. Determine PM concentration using EPA Method 5, 5B, 5D, 5F, or 5I, as applicable or total metal HAP concentration using EPA Method 29 (40 CFR part 60, appendix A)
  - f. (a) through (f) above must be accomplished according to the following requirements:
- i. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.
  - ii. Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. The PM concentration is





determined using only the front-half (probe rinse and filter) of the PM catch.

- iii. For Method 29, only the measured concentration of the listed metal HAP analytes that are present at concentrations exceeding one-half the quantification limit of the analytical method are to be used in the sum. If any of the analytes are not detected or are detected at concentrations less than one-half the quantification limit of the analytical method, the concentration of those analytes is assumed to be zero for the purposes of calculating the total metal HAP.
  - iv. A minimum of three valid test runs are needed to comprise a PM or total metal HAP performance test.
  - v. For cupola metal melting furnaces, sample PM or total metal HAP only during times when the cupola is on blast.
- vi. For electric arc and electric induction metal melting furnaces, sample PM or total metal HAP only during normal melt production conditions, which may include, but are not limited to the following operations: Charging, melting, alloying, refining, slagging, and tapping.
- vii. Determine and record the total combined weight of tons of metal charged during the duration of each test run. You must compute the process-weighted mass emissions of PM according to Equation 1 of §63.10898(d) for an individual furnace or Equation 2 of §63.10898(e) for the group of all metal melting furnaces at the foundry.
- 2. Fugitive emissions from buildings or structures housing any iron and steel foundry emissions sources subject to opacity limit in §63.10895(e)
- a. Using a certified observer, conduct each opacity test according to EPA Method 9 (40 CFR part 60, appendix A-4) and 40 CFR 63.6(h)(5)
- i. The certified observer may identify a limited number of openings or vents that appear to have the highest opacities and perform opacity observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single opacity observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.
- ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the opacity test such that the opacity observations are recorded during the PM or total metal HAP performance tests.
- b. As alternative to Method 9 performance test, conduct visible emissions test by Method 22 (40 CFR part 60, appendix A-7). The test is successful if no visible emissions are observed for 90 percent of the readings over 1 hour. If VE is observed greater than 10 percent of the time over 1 hour, then the facility must conduct another performance test as soon as possible, but no later than 15 calendar days after the Method 22 test, using Method 9 (40 CFR part 60, appendix A-4)
- i. The observer may identify a limited number of openings or vents that appear to have the highest visible emissions and perform observations on the identified openings or vents in lieu of performing observations for each opening or vent from the building or structure. Alternatively, a single observation for the entire building or structure may be performed, if the fugitive release points afford such an observation.
- ii. During testing intervals when PM or total metal HAP performance tests, if applicable, are being conducted, conduct the visible emissions test such that the observations are recorded during the PM or total metal HAP performance tests.
- Note 1: You may also use as an alternative to EPA Method 3B (40 CFR part 60, appendix A), the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas, ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference—see §63.14).

# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZZ Table 3]
Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources
Applicability of General Provisions to New and Existing AffectedSources Classified as Large Foundries

Table 3 to Subpart ZZZZZ of Part 63—Applicability of General Provisions to New and Existing Affected Sources Classified as Large Foundries





As required	d in §63.10900(a), you must meet each requiren	nent in the followi	ng table that applies to you:
Citation		Applies to large oundry?	Explanation
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities	Yes.	
63.5	Construction/reconstruction	Yes.	
63.6(a)-(g)	Compliance with standards and maintenance requirements	Yes.	
63.6(h)	Opacity and visible emissions standards	Yes.	
63.6(i)(i)-(j)	Compliance extension and Presidential compliance exemption	Yes.	
63.7(a)(3), (b)-(h)	Performance testing requirements	Yes.	
63.7(a)(1)-(	(a)(2) Applicability and performance test		ubpart ZZZZZ specifies applicability rformance test dates.
(b), (c)(1)-( (c)(6)-(c)(8		Yes	
63.8(a)(4)	Additional monitoring requirements for control devices in §63.11	No.	
63.8(c)(4)	Continuous monitoring system (CMS) requirements	No.	
63.8(c)(5)	Continuous opacity monitoring system (COMS) minimum procedures	No.	
63.8(g)(5)	Data reduction	No.	
63.9	Notification requirements	Yes.	
	Recordkeeping and reporting requirements )(xii) -(b)(2)(xiv), )-(2), (e)(1)-(2), (f)	s Yes.	
63.10(c)(1) (c)(9)-(15)	-(6), Additional records for continuous monitor systems	ing No.	
63.10(c)(7)	-(8) Records of excess emissions and param monitoring exceedances for CMS	eter Yes.	
63.10(d)(3)	Reporting opacity or visible emissions	Yes.	





	observations	
63.10(e)(3)	Excess emissions reports	Yes.
63.10(e)(4)	Reporting COMS data	No.
63.11	Control device requirements	No.
63.12	State authority and delegations	Yes.
63.13-63.16	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and con Performance track provisions	

# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZZ Table 4]
Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources
Compliance Certifications for New and Existing Affected SourcesCompliance Certifications for New and Existing

Affected Sources

Table 4 to Subpart ZZZZZ of Part 63—Compliance Certifications for New and Existing Affected Sources Classified as Large Iron and Steel Foundries

As required by §63.10900(b), your notification of compliance status must include certifications of compliance according to the following table:

(These notifications of compliance status required by §63.9(h) must include this certification of compliance, signed by a responsible official)

- a) Each new or existing affected source classified as a large foundry and subject to scrap management requirements in §63.10885(a)(1) and/or (2)
- 1) "This facility has prepared, and will operate by, written material specifications for metallic scrap according to §63.10885(a)(1)" and/or "This facility has prepared, and will operate by, written material specifications for general iron and steel scrap according to §63.10885(a)(2)."
- b) Each new or existing affected source classified as a large foundry and subject to mercury switch removal requirements in §63.10885(b)
- 1) "This facility has prepared, and will operate by, written material specifications for the removal of mercury switches and a site-specific plan implementing the material specifications according to §63.10885(b)(1)" and/or "This facility participates in and purchases motor vehicles scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator according to §63.10885(b)(2) and have prepared a plan for participation in the EPA approved program according to §63.10885(b)(2)(iv)" and/or "The only materials from motor vehicles in the scrap charged to a metal melting furnace at this facility are materials recovered for their specialty alloy content in accordance with §63.10885(b)(3) which are not reasonably expected to contain mercury switches" and/or "This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with §63.10885(b)(4)."
- c) Each new or existing affected source classified as a large foundry and subject to §63.10886
- 1) "This facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to §63.10886."
- d) Each new or existing affected source classified as a large foundry and subject to §63.10895(b)
- 1) "This facility operates a capture and collection system for each emissions source subject to this subpart according to §63.10895(b)."







- e) Each existing affected source classified as a large foundry and subject to §63.10895(c)(1)
- 1) "This facility complies with the PM or total metal HAP emissions limit in §63.10895(c) for each metal melting furnace or group of all metal melting furnaces based on a previous performance test in accordance with §63.10898(a)(1)."
- f) Each new or existing affected source classified as a large foundry and subject to §63.10896(a)
  - 1) "This facility has prepared and will operate by an operation and maintenance plan according to §63.10896(a)."
- g) Each new or existing (if applicable) affected source classified as a large foundry and subject to §63.10897(d)
- 1) "This facility has prepared and will operate by a site-specific monitoring plan for each bag leak detection system and submitted the plan to the Administrator for approval according to §63.10897(d)(2)."

# # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.10900]

Subpart ZZZZZ - National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources What parts of the General Provisions apply to my large foundry?

[This permit condition applies only to Large foundries as specified in 63.10895(a) and 63.10900(a) & (b).]

- (a) If you own or operate a new or existing affected source that is classified as a large foundry, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 3 of this subpart. [See regulation for Table 3 of 40 CFR Part 63 Subpart ZZZZZ.]
- (b) [Paragraph 63.10900(b) is printed under REPORTING REQUIREMENTS in this section of permit.]







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

Source id	Source Description		
102	MOLDING, POURING	6, COOLING	
<b>Emission Limi</b>	t		Pollutant
5.250	Lbs/Hr		PM10
23.000	Tons/Yr	(based on a consecutive 12-month rolling total).	PM10
0.020	gr/DRY FT3		TSP
104	CASTING CLEANING		

Emission Limit	Pollutant
0.040 gr/DRY FT3	TSP

106 CLEANING MACHINE (WHEELABRATOR)

<b>Emission Limit</b>		Pollutant
0.020	gr/DRY FT3	TSP

110 ELECTRIC INDUCTION MELT FURNACES (4)

<b>Emission Limit</b>			Pollutant
0.005	gr/DRY FT3		TSP
0.644	Lbs/Hr		TSP
2.800	Tons/Yr	(based on a consecutive 12-month rolling total).	TSP

# **Site Emission Restriction Summary**

Emission Limit		Pollutant
25.000 Tons/Yr	shall be less than 25 tpy for all HAPS combined	Hazardous Air Pollutants
10.000 Tons/Yr	shall be less than 10 tpy for any single HAP	Hazardous Air Pollutants
100.000 Tons/Yr	shall be less than 100 tpy	TSP
100.000 Tons/Yr	shall be less than 100 tpy	СО
100.000 Tons/Yr	shall be less than 100 tpy	NOX
50.000 Tons/Yr	shall be less than 50 tpy	VOC

# **Alternative Operation Emission Restriction Summary**

Source Id		Source Description		
110		ELECTRIC INDUCTION MELT FURNACES (4)		
Emission Limit			Pollutant	
0.060	Lbs/Tons	of metal charged.	Hazardous Air Pollutants	
0.800	Lbs/Tons	of metal charged.	TSP	



# SECTION G. Miscellaneous.

- (a) The Capacity/Throughput numbers listed in Section A, the Site Inventory List, and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable emission limits are listed in the Restrictions section for each source and source group and in Section C. The emission limitations contained in Section F of this permit are for informational purposes and are not to be considered as enforceable limits.
- (b) Source ID: Department assigned ID number for the source Source Name: Department assigned name for the source

Capacity/Throughput: The maximum capacity or throughput for the source (not a limit)

Fuel/Material: The fuel/material assigned to SCC for the source

Schematics:

FML: Fuel material location
CU: Combustion Unit source

PROC: Process
CNTL: Control device

STAC: Emission point / Stack

- (c) Source 102 is the combined emissions from the processes and equipment controlled by C102, the PEI dust collector: sand molding, iron pouring, and mold cooling. This source was previously operated under plan approval PA-25-090A. The equipment associated with this source and exhausted to C102 is as follows:
  - (1) Disamatic Mold Cooling Conveyor #1- manufactured by Roberts; Model # NST 10 ACOB; installed in 1968.
  - (2) Disamatic Mold Cooling Conveyor #2 manufactured by Roberts; Model # NST 10 ACOB; installed in 1968.
  - (3) Pouring Station for Disamatic production line #3; installed in 1987.
  - (4) Disamatic Mold Cooling Conveyor #3 manufactured by Roberts; Model #FST-10; installed in 1987.
  - (5) Disamatic Mold Cooling Conveyor #4
- (d) Source 103 is the combined emissions from all of the equipment and processes which exhaust to C103, the Standard Havens dust collector. This source was previously operated under permit 25-309-009. The processes include:
  - Sand Handling,
  - Sand Molding,
  - Iron Pouring,
  - · Sand Mold & Casting Cooling, and
  - · Casting shakeout.

The equipment associated with this source and exhausted to C103 is as follows:

- (1) Rotory Media Drum (Casting Shakeout) manufactured by Didion; model # MD100; installed in 1992.
- (2) Rotary Media Drum (Casting Shakeout) manufactured by Didion; model # MD100; installed in 1993.
- (3) Continuous Sand Muller (Disamatic Muller) manufactured by Simpson; model # 22G; installed in 1980.
- (4) Continuous Sand Muller (Heavy Molding Muller) manufactured by Simpson; model # 225G; installed in 1974.
- (5) Sand Conveyor "Sand Preparation Conveyors" manufactured by Rexnord; models HR 361 and HR 241; installed in 1979-1980.
  - (6) Heavy Mold Cooling Conveyor manufactured by Hunter and Rexnord; models HR 3680F and HR 36150; installed in 1978.
  - (7) Sand Elevator System manufactured by Summit Foundry; installed in 1990-1992.
  - (8) Pouring Station for #1 Disamatic; installed in 1980.
  - (9) Pouring Station for #2 Disamatic; installed in 1980.
  - (10) Hunter Pouring Station; installed in 1980.
  - (11) Disa # 4 short Rex shaker table.
  - (12) Heavy molding shakeout table.
  - (13) Disa # 3 shakeout table.
- (e) Source 104 is the combined particulate emisssions from the equipment which is exhausted to C104, the Mikropul dust collector. This equipment is used for the casting cleaning process. This source was previously operated under permit 25-304-034. The equipment associated with the source and exhausted to C104 is comprised of:
  - (1) Shot Blast Tumbler Cleaning Machine manufactured by Pangborn; Model # 34 GN; installed in 1988.
  - (2) Shot Blast Tumbler Cleaning Machine manufactured by Pangborn; Model # 26 GN; installed in 1991.
  - (3) Vibratory Conveyor (Casting Sorting Conveyor) manufactured by Renold; Model # LC-42; installed in 1990.
  - (4) Grinders:



# SECTION G. Miscellaneous.

- (a) manufactured by Setco; Model # 100; installed in 1972.
- (b) manufactured by Setco; Model # 101; installed in 1972.
- (c) manufactured by Setco; Model # 103; installed in 1972.
- (f) Source 108 represents the emissions from natural gas combustion at the vibratory sand shakeout tables at each of the 5 production lines: Disa #1, Disa #2, Disa #3, Disa #4, and Hunter Heavy Molding line.
- (g) Source 110 is the combined emissions from the 4 electric induction furnaces and the secondary emissions from those furnaces. Secondary emissions from the furnaces include tapping into the pouring ladles and ductile inoculation in the pouring ladles. All operations from this source are controlled by C110 (ETA2000 Baghouse) and are vented to a single stack (S110).
- (h) The following regulations are incorporated into this permit by reference to the regulation.
  - 25 Pa. Code §129.52 Table 1 -- Emission Limits of VOCs in Surface Coatings by Process Category;
  - 40 CFR Part 63 Subpart ZZZZZ -- NESHAPs for Iron Foundry -- §63.10905, Who implements and enforces Subpart

### ZZZZZ:

- 40 CFR Part 63 Subpart ZZZZZ -- NESHAPs for Iron Foundry -- §63.10906, Definitions applicable to Subpart ZZZZZ;
- 40 CFR Part 63 Subpart ZZZZZ, Table 1 -- Test Methods for PM, total Metal HAP, & Opacity for Large foundry;
- 40 CFR Part 63 Subpart ZZZZZ, Table 3 -- Subpart A General Provisions applicable to Large foundry;
- 40 CFR Part 63 Subpart ZZZZZ, Table 4 -- Requirements for Compliance Certifications for Large foundry;
- (i) The original Operating Permit No. 25-00090 (issued April 25, 2002) has been administratively amended to incorporate the applicable conditions from plan approval 25-090B. The plan approval was for the modification of the cupola (identified as Source 101 in the original Operating Permit) and associated air cleaning devices.
- (j) This permit was renewed on September 28, 2007. The sources and conditions from Plan Approval 25-090C have been incorporated into this permit.
- (k) This permit was administratively amended on April 7, 2009. The changes incorporated into the permit were for the responsible official and permit contact. The responsible official was changed from operations manager Rick Stuczynski to operations manager Ricardo Nieves. The permit contact person was changed from Plant Engineer Jack Marini to Environmental, Health and Safety Director Grady Gunesch.
- (I) This permit was administratively amended on May 11, 2010 to incorporate the change of responsible official to Bill Masek Operations Manager.
- (m) This permit renewal effective June 26, 2013, is issued on June 26, 2013, and includes the request to change the responsible official and the permit contact person and includes the Administrative Amendment to incorporate the conditions of plan approval 25-090D.
- (n) This permit was administratively amended on November 13, 2015 to incorporate the requirements of plan approval 25-090E with the following notes:
- 1) The subject of this plan approval is the removal of annual operational hour limits for the facility and sources 102 (Molding, Pouring, Cooling), 107 (Paint Dip Operation) and 110 (Electric Induction Melt Furnaces 4) at the facility. The recent replacement of the cupola with induction furnaces has reduced facility emissions to the point where the operation hours restrictions are no longer needed to keep emissions under major source thresholds.
- 2) The applicant has also requested the following administrative changes to this plan approval:
- \* Source 102, Change the annual PM10 emission limit to a 12-month rolling emission limit.
- \* Source 110, Change the annual PM emission limit to a 12-month rolling emission limit.
- \* Source 106 (Cleaning Machine Wheelabrator), which was exempted from plan approval on December 19, 2013 via an RFD using exemption #36, be added to the synthetic minor operating permit.
- \* Source 112, which was exempted from plan approval on December 19, 2013 via an RFD using exemption #36, be added to the synthetic minor operating permit.



# SECTION G. Miscellaneous.

- \* Change Source 110 throughput description in AIMS from 1.0 tons per hour to 14.0 tons per hour. This was the throughput for this source in plan approval 25-090D.
- 3) The applicant has requested that the facility be classified as a "small foundry" for 40 CFR Part 63 Subpart ZZZZZ (5Z) (National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries) purposes. Zurn Industries notified the Department on January 5, 2009 that it was considered a large foundry under 5Z requirements, based on the 2008 production melt of 20,928 tons. The limit to be considered a small foundry is less than 20,000 tons of production. Zurn has not exceeded 19,471 tons of production per year from 2009 to 2013. 5Z requirements allow a facility to be reclassified to a small foundry after three consecutive production melt years under 20,000 tons. Zurn has shown that the foundry should be considered a small foundry for 5Z purposes.
- 4) Should Zurn Industries meet or exceed 20,000 tons of production melt in any 12 month rolling period, the facility must follow the 5Z requirements for a "Large Foundry".
- 5) In October of 2011, during the course of completing plan approval 25-090D, it was determined that the Zurn Cast Metals Division was an existing foundry according to definations in 40 CFR Part 63 Subpart ZZZZZ and based on information provided by Zurn Industries LLC.
- 6) During the course of the administrative amendment, the Department was informed that Source 107 Paint Dip Operation was removed from the facility in 2014. Also the facility requested the permit contact change to Daniel Murawski and the responsible official change to Patrick Reilly. These administrative changes were also made to the permit.





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