



37-00243

INMETCO/ELLWOOD CITY



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: April 13, 2016  
Revision Date: December 6, 2019  
Revision Type: Modification

Effective Date: December 6, 2019  
Expiration Date: [REDACTED]

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 37-00243

Federal Tax Id - Plant Code: 13-2858892-1

Owner Information

Name: INMETCO LLC  
Mailing Address: 1 INMETCO DR  
ELLWOOD CITY, PA 16117-6231

Plant Information

Plant: INMETCO/ELLWOOD CITY  
Location: 37 Lawrence County 37002 Ellwood City Borough  
SIC Code: 3341 Manufacturing - Secondary Nonferrous Metals

Responsible Official

Name: RICHARD LUNN  
Title: EHS MGR  
Phone (724) 758 - 2819

Permit Contact Person

Name: RICHARD LUNN  
Title: EHS MGR  
Phone: (724) 758 - 2819

[Signature]

ERIC A. GUSTAFSON, NORTHWEST REGION AIR PROGRAM MANAGER



Pages 2-16, 19-26, 29-35, 37, and 39-76 are redacted entirely.

**SECTION C Site Level Requirements**

opacity of visible emissions.

(3) When the emission results from sources specified in Section C Condition #001, 123.1(a)(1) — (6) (relating to prohibition of certain fugitive emissions).

# 006 [REDACTED]

Operating permit terms and conditions.

a) Facility wide emissions of Nitrogen Oxides (NOx) shall not exceed 253.2 tons during any twelve consecutive months.

b) Facility wide emissions of Volatile Organic Compounds (VOCs) shall not exceed 178.1 tons during any twelve consecutive months.

[Authority for this condition is also derived from 25 Pa Code 129.91 for RACT I.]

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II]

[The NOx emission limit in paragraph (a) streamlined the NOx emission limit of 634.9 tons during any twelve consecutive months from RACT I.]

**II. TESTING REQUIREMENTS.**

# 007 [REDACTED]

Operating permit terms and conditions.

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.

[Authority for this condition is also derived from 25 Pa Code 129.91.]

**III. MONITORING REQUIREMENTS.**

[REDACTED] Monitoring and related recordkeeping and reporting requirements.

The permittee shall conduct daily inspections of the area surrounding the plant to detect the presence of fugitive emissions and visible emissions. A log of these inspections shall be maintained and shall be made available to the Department upon request.

**IV. RECORDKEEPING REQUIREMENTS.**

# 009 [REDACTED]

Operating permit terms and conditions.

a) The permittee shall maintain production records containing sufficient data and calculations to clearly demonstrate compliance with the VOC and NOx emission limitations for the facility and individual sources.

b) These production records and results of the emission tracking shall be maintained by the permittee for a period of at least five (5) years and shall be made available to the Department upon request.

[Authority for this condition is also derived from 25 Pa Code 129.91.]

[REDACTED] [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

Any fugitive emissions or visible emissions that are detected by plant personnel shall be reported to the Shift Supervision. The Shift Supervision shall record the event on the production log. Appropriate corrective action shall be taken and noted in the production log.

# 011 [REDACTED]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall calculate, on a monthly basis, the 12-month rolling total of NOx and VOC emissions from this facility. This total is to be calculated by determining the NOx and VOC emissions for the current month and adding the NOx

**SECTION C Site-Level Requirements**

and VOC emissions from the previous eleven months to arrive at the 12-month rolling total.

**# 012 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The permittee can modify the mixture of pollutants regulated under section 112 of the Clean Air Act (42 U.S.C.A. Subsection 7412) which are VOCs or PM10 so long as the emission limitations of the permit are not violated. The permittee shall keep a log which identifies the mixture of pollutants regulated under section 112 and report the changes in the mixture of pollutants regulated under section 112 with the next report required to be provided to the Department.

**# 013****Compliance demonstration and recordkeeping requirements.**

[129.100(d), (e), (f), and (i)]

(d) The owner and operator of an air contamination source subject to this section and § § 129.96—129.99 shall keep records to demonstrate compliance with § § 129.96—129.99 in the following manner:

(1) The records must include sufficient data and calculations to demonstrate that the requirements of § § 129.96—129.99 are met.

(2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

~~(e) Beginning with the compliance date specified in § 129.97(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable NOx emission rate threshold specified in § 129.99(b) and the requirements of § 129.97 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.~~

~~(f) Beginning with the compliance date specified in § 129.97(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable VOC emission rate threshold specified in § 129.99(c) and the requirements of § 129.97 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.~~

(i) The records shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

**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 25 Pa. Code 135.3 and 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. These records shall be maintained for a minimum of five (5) years.

**[25 Pa. Code §135.21]****Emission statements**

(a) Except as provided in subsection (d), this section applies to stationary sources or facilities:

**SECTION B: Source Level Requirements**

Source ID: 102

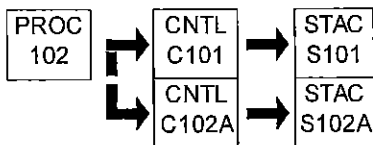
Source Name: ROTARY HEARTH FURNACE

Source Capacity/Throughput: 15,300 Tons/HR

RAW MATERIALS

30,000,000 CF/HR

NAT.GAS



~~This source occurs in alternate operation~~ ALTERNATIVE RHF CONTROL #1  
ALTERNATIVE RHF CONTROL #2

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

~~(a) This section applies to sources except those subject to other provisions of this article, with respect to the control of sulfur compound emissions.~~

~~(b) No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.~~

**[25 Pa. Code §127.42b]****Plan approval terms and conditions.**~~[Plan Approval 37-243D]~~

~~(a) Emissions shall comply with 25 Pa Code 123.1 & 123.31 for fugitive and odor emissions respectively.~~

~~[Plan Approval 37-243F]~~

~~(b) No person may permit the emission into the outdoor atmosphere of filterable particulate matter in a manner that the concentration of filterable particulate matter (FPM) in the effluent gas exceeds 0.02 grain per dry standard cubic foot. [This condition replaces Condition #002(b) from 37-243D]~~

~~[Plan Approval 37-243D]~~

~~(c) 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 10% for a period or periods aggregating more than 3 minutes in any hour.~~

~~2. Equal to or greater than 30% at any time.~~

~~[Plan Approval 37-243F]~~

~~(d) The requirements for carbon monoxide (CO) stack testing have been satisfied. Based on the inspection report dated 12/21/2010, a CO emission limit is not being imposed for this source.~~

**# 003****Operating permit terms and conditions.**

Emissions of Nitrogen Oxides (NO<sub>x</sub>) from this source shall not exceed 99.5 pounds per hour. [Authority for this condition is also derived from 25 Pa Code 129.91 for RACT I.]

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

Emissions of NO<sub>x</sub> from this source shall not exceed and 100 TPY on a 12 month rolling basis.

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

[Compliance with these emission limits allows this facility to be classified as a synthetic minor and fall under the eligibility threshold of 40 CFR, Part 51, Subpart P, Best Available Retrofit Technology (BART).]

**SECTION D Source Level Requirements**

[Compliance with the BART NOx emission limit of 100 tons per year on a 12-month rolling total basis, assures compliance with the former RACT I NOx emission limit of 435.6 tons during any twelve consecutive month period.]

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

The VOC emissions from this source shall not exceed 21.58 lbs/hr and 94.5 TPY on a 12-month rolling basis.

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

**Throughput Restriction(e).****# 005 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The Rotary Hearth Furnace (RHF) is permitted to process only the materials found on the following list. The list is consistent with those items listed in INMETCO's Hazardous Waste Part B Permit, but is being expressed here in a descriptive form:

- 1) Electric Arc Furnace Dust/sludges/solids/liquids—USEPA Waste Code K061.
- 2) Water Treatment sludges/solids/liquids from electroplating—USEPA Waste Code F006.
- 3) Spent Pickle Liquor, sludges/solids/liquids—USEPA Waste Code K062.
- 4) Spent Pot Liner from primary aluminum reduction—USEPA Waste Code K088.
- 5) Solid and liquid materials under USEPA Waste Codes:
  - i) D004 Arsenic
  - ii) D005 Barium
  - iii) D006 Cadmium
  - iv) D007 Chromium
  - v) D008 Lead
  - vi) D010 Selenium
  - vii) D011 Silver.
- 6) Solid waste exhibiting the USEPA Waste Code for reactivity D0003.
- 7) Solid Waste exhibiting the USEPA Waste Code For corrosivity D002.
- 8) Solid Waste exhibiting the USEPA Waste Code For ignitability D001.
- 9) Spent Catalysts—USEPA Waste Code K171 and/or K172.
- 10) Metallic grindings, turnings, swarf, borings, and dusts—metallurgical materials.
- 11) Mill scale i.e.: from rolling, forging, extrusion, conditioning, annealing, and tempering operations.
- 12) Shot blasting dust and compounds.
- 13) Scrap/spent magnesium.
- 14) Nickel, chromium, molybdenum, cobalt, copper, zinc, and other metal bearing catalysts including off spec., spent and active types.
- 15) Chromia, magnesite, silica, carbon, and dolomite refractory, and foundry sand.
- 16) Graphite, carbon fines, low volatile petroleum coke in dust, chunks, machining fines, and sludge forms.
- 17) Spent chromic, nitric, sulfuric, hydrofluoric, and hydrochloric acids are used to make pellets to the furnace.
- 18) Nickel, cadmium, zinc, cobalt, sulfur, sodium, copper, nickel iron, zinc carbon, magnesium, carbon air, alkaline, nickel metal hydride, lithium ion, lithium nickel chloride batteries and battery production scrap, and fuel cells, that are direct feeds, with only pre-sizing prior to feeding.
- 19) Nickel and chromium electroplating wastes, liquids, and solids.
- 20) Metal bearing slag, dross, and skims.
- 21) Electrochemical Machining (ECM) and Electro-Drilling Machining (EDM) solids.
- 22) Metal bearing cake/sludge/dusts/liquids.
- 23) Metal containing/impregnated filters, super sacks, baghouse bags, plating bath cartridges, anodes, anode bags, pads, plastic liners from roll off and dump truck loads that can fail 40 CFR 261.7, and residues of hazardous waste in empty containers that can not be cleaned economically.
- 24) CERCLA waste from a clean up that are metal bearing.
- 25) On site generation of production contaminated materials, refractory, filter media, recycling of in house cake, dust, water, and sludge, and pre-sized scrap metals and fines.

**SECTION E: Source Level Requirements**

# 015

**Operating permit terms and conditions.**

To ensure proper operation and combustion, the burners for the RHF are to be cleaned on a rotating basis, with each burner being cleaned approximately every two weeks. The cleaning procedure entitled, "RHF-001, Burner Cleaning and Relighting", dated May 27, 2013, is to be used.

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

**VII. ADDITIONAL REQUIREMENTS.**

# 016

**Plan approval terms and conditions.**

[Plan Approval 37-243F]

(a) This plan approval supersedes plan approval 37-243D issued on March 28, 2008.

[Plan Approval 37-243F]

(b) Any information required to be submitted as part of this plan approval should be submitted to the attention of Chief, New Source Review Section, Air Quality Control, Northwest Regional Office, 230 Chestnut Street, Meadville, PA 16335.

[Plan Approval 37-243F]

(c) Issuance of an Operating Permit is contingent upon satisfactory compliance with the plan approval conditions, upon the source and control device being installed and operated as stated within the application, and upon satisfactory demonstration that the emissions from the source will not be in violation of applicable Rules and Regulations of the Department.

The following are CAM related requirements:

[Plan Approval 37-243D] [Additional authority for this permit condition is also derived from 40 CFR 64.8 & 64.9]

(d) The permittee shall develop and implement a Quality Improvement Plan (QIP) as expeditiously as practicable if any of the following occur:

1. For properly and accurately collected data, accumulated excursions exceed two percent (2%) of the data.
2. Six (6) excursions of any single parameter occur in a six (6) month reporting period.
3. The Department determines after review of all reported information that the permittee has not responded acceptably to an excursion.

[Plan Approval 37-243D] [Additional authority for this permit condition is also derived from 40 CFR 64.8 & 64.9]

(e) The QIP plan should be developed within 60 days and the permittee shall provide a copy of the QIP to the Department. Furthermore, the permittee shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

[Plan Approval 37-243D] [Additional authority for this permit condition is also derived from 40 CFR 64.8 & 64.9]

(f) The permittee shall record actions taken to implement a QIP during a reporting period and all related actions including, but not limited to inspections, repairs, and maintenance performed on the monitoring equipment.

[Plan Approval 37-243D] [Additional authority for this permit condition is also derived from 40 CFR 64.8 & 64.9]

(g) In accordance with 40 CFR § 64.8, the QIP shall include procedures for evaluating the control performance problems. Based on the results of the evaluation procedures, the permittee shall modify the QIP and provide the Department with a copy, to include procedures for conducting more frequent, or improved, monitoring in conjunction with one or more of the following:

1. Improved preventive maintenance practices
2. Process operation changes
3. Appropriate improvements to the control methods

**SECTION D Source Level Requirements**

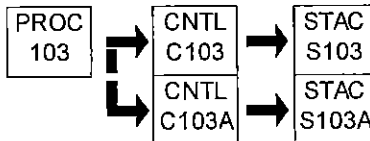
Source ID: 103

Source Name: SUBMERGED ELEC ARC FURNACE

Source Capacity/Throughput:

10.000 Tons/HR

FERROALLOY



This source occurs in alternate operation **ALTERNATIVE EAF CONTROL**

**I. RESTRICTIONS.****Emission Restriction(s).****#004 [25 Pa. Code §123.24]****General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

**Plan approval terms and conditions.**

Particulate matter emissions from this source shall not exceed 0.01 grains per dry standard cubic foot.

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code 123.13.]

Visible emissions from this source are limited to no more than 10% opacity at any time.

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in 25 Pa. Code 123.41.]

**#003****Operating permit terms and conditions.**

Emissions of Nitrogen Oxides (NO<sub>x</sub>) from this source shall not exceed 45.0 pounds per hour.

[Authority for this condition is also derived from 25 Pa Code 129.91 for RACT I.]

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

Emissions of NO<sub>x</sub> from this source shall not exceed 145.5 TPY on a 12-month rolling basis.

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

[Compliance with the BART NO<sub>x</sub> emission limit of 145.5 tons per year on a 12-month rolling total basis, assures compliance with the former RACT NO<sub>x</sub> emission limit of 197.3 tons during any twelve consecutive month period.]

**#004****Operating permit terms and conditions.**

VOC emissions from this source shall not exceed 16.56 lbs/hr and 72.6 TPY on a 12-month rolling basis.

[Authority for this condition is also derived from 25 Pa Code 129.99(d) - (h) for RACT II.]

**#005 Elective Restriction**

The emissions from Source ID:103 Submerged Electric Arc Furnace shall not exceed any of the following limits.

NO<sub>x</sub> emissions shall never exceed 145.5 tons per year on a 12-month rolling basis.

PM 10 emissions shall never exceed 157.0 tons per year on a 12-month rolling basis.