*West Virginia Department of Environmental Protection*
*Harold D. Ward*
*Cabinet Secretary*

# Construction Permit

## R14-0040

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.), 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation, and 45 C.S.R. 14 - Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

Issued to:

**CMC Steel US, LLC**
**CMC Steel West Virginia**
**003-00286**

Laura M. Crowder

*Laura M. Crowder*
*Director, Division of Air Quality*

Laura M. Crowder

Digitally signed by: Laura M. Crowder
DN: CN = Laura M. Crowder email = Laura.M.Crowder@wv.gov C = US O = West Virginia Department of Environmental Protection OU = Division of Air Quality
Date: 2023.06.30 12:07:35 -04'00'

*Issued: June 30, 2023*

| | |
|---|---|
| Facility Location: | 447 DuPont Road, Martinsburg, Berkeley County, WV |
| Mailing Address: | 1 Steel Mill Drive, Seguin, TX 78155 |
| Facility Description: | Steel Micro Mill |
| SIC/NAICS Code: | 3317/331210 |
| UTM Coordinates: | Easting: 251.73 km • Northing: 4,380.50 km • Zone: 18 |
| Latitude/Longitude: | 39.53829/-77.88892 |
| Permit Type: | Construction |
| Description: | Construction of a new micro mill with associated support operations to produce long steel products at a maximum production rate of 650,000 tons/year. |

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*The facility is a major source subject to 45CSR30. The Title V (45CSR30) application will be due within twelve (12) months after the commencement date of any operation authorized by this permit.*

## Table of Contents

## Table 1.0: Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description[1] | Year Installed | Design Capacity | Control Device[2] |
|---|---|---|---|---|---|
| **Raw Material Storage & Handling** | | | | | |
| ***Scrap Storage & Handling*** | | | | | |
| TR51A | TR51A | ECS Storage Piles A, B, and C Drop Points | New | 830 TPH | PE[3] |
| W51A/B/C | W51A/B/C | ECS Storage Piles | New | 16,600 $ft^{2}$[4] | PE[3] |
| TR51B | TR51B | ECS Overage Storage Pile Drop Point | New | 330 TPH | None |
| W51D | W51D | ECS Overage Storage Pile | New | 12,100 $ft^2$ | None |
| TR51C | TR51C | Rail Storage Pile A, B, C, and D Drop Points | New | 110 TPH | None |
| W51E/F/G/H | W51E/F/G/H | Rail Storage Piles | New | 36,400 $ft^{2}$[4] | None |
| TR51E | TR51E | Truck Storage Pile A, B, C, and D Drop Points | New | 110 TPH | None |
| W51K/L/M/N | W51K/L/M/N | Truck Storage Piles | New | 36,400 $ft^{2}$[4] | None |
| CR1 | CR1 | Ball Drop Crushing | New | n/a | None |
| TR131 | TR131 | Residual Scrap Storage Pile Drop Point | New | 25 TPH | None |
| W81 | W81 | Residual Scrap Storage Pile | New | 21,200 $ft^2$ | None |
| TORCH1 | TORCH1 | Propane/Natural Gas-Fired Scrap Cutting Torches | New | 0.32 mmBtu/hr/ 0.13 mmBtu/hr | None |
| ***Carbon, Alloys, Fluxing Agents & Other Material Storage & Handling*** | | | | | |
| TR71 | TR71 | Inside ECS Building Fluxing Agent Drop Point | New | 30 TPH | FE |
| TR81 | TR81 | Alloy Aggregate Storage Pile Drop Point | New | 60 TPH | PE |
| W61 | W61 | Alloy Aggregate Storage Pile | New | 1,000 $ft^2$ | PE |
| TR91A | TR91A | Meltshop Refractory Drop Points | New | 25 TPH | FE |
| TR91B | TR91B | Outside Refractory Drop Points | New | 25 TPH | None |
| TR141 | TR141 | Mill Scale Pile Storage Pile Drop Point | New | 60 TPH | PE |
| W111 | W111 | Mill Scale Storage Pile | New | 3,500 $ft^2$ | PE |
| FLXSLO11 | FLXSLO11 | Fluxing Agent Storage Silo 1 | New | 3,000 scfm 250 Tons | BV (FLXSLO11-BV) |
| FLXSLO12 | FLXSLO12 | Fluxing Agent Storage Silo 2 | New | 3,000 scfm 250 Tons | BV (FLXSLO12-BV) |
| CARBSLO1 | CARBSLO1 | Carbon Storage Silo 1 | New | 2,050 scfm 250 Tons | BV (CARBSLO1-BV) |

## Table 1.0: Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description[1] | Year Installed | Design Capacity | Control Device[2] |
|---|---|---|---|---|---|
| ***Haulroads*** | | | | | |
| PR1 | Fugitives | Paved Haulroads | New | n/a | SW,WS[5] |
| UR1 | Fugitives | Unpaved Haulroads | New | n/a | WS[5] |
| **Melt Shop** | | | | | |
| EAF1[6] | BH1 | Electric Arc Furnace | New | 117 TPH | BH (BH1-BH) |
| | CV1 | | | | n/a |
| LMS1[6] | BH1 | Ladle Metallurgy Station | New | 117 TPH | BH (BH1-BH) |
| | CV1 | | | | n/a |
| CAST1[6] | CV1 | Continuous Caster | New | 117 TPH | n/a |
| DUSTSLO1 | DUSTSLO1 | EAF Baghouse Dust Silo | New | 1,300 scfm 190 Tons | BV (DUSTSLO1-BV) |
| LPH1 | CV1[7] | Horizontal Ladle Preheaters (3 Units) | New | 18 mmBtu/hr | None |
| LD | CV1[7] | Ladle Dryers (2 Units) | New | 16 mmBtu/hr | None |
| TPH1 | CV1[7] | Tundish Preheaters (2 Units) | New | 12 mmBtu/hr | None |
| TD1 | CV1[7] | Tundish Dryer | New | 6 mmBtu/hr | None |
| TMD1 | CV1[7] | Tundish Mandril Dryer | New | 1 mmBtu/hr | None |
| SRDHTR1 | CV1[7] | Shroud Heater | New | 0.50 mmBtu/hr | None |
| MSAUXHT | CV1[7] | Meltshop Comfort Heaters (20 Units) | New | 8 mmBtu/hr | None |
| **Rolling Mill/Spooler** | | | | | |
| RMV1 | RMV1 | Rolling Mill[8] | New | 117 TPH | None |
| CBV1 | CBV1 | Cooling Beds[8] | New | 117 TPH | None |
| SPV1 | SPV1 | Spooler[8] | New | 117 TPH | None |
| BF1 | RMV1[7] | Bit Furnace | New | 0.23 mmBtu/hr | None |
| RMAUXHT | RMV1[7] | Rolling Mill Comfort Heaters (20 Units) | New | 8 mmBtu/hr | None |
| **Slag Processing** | | | | | |
| TR11A | TR11A | Slag Storage Pile Drop Point | New | 100 TPH | None[9] |
| W71A | W71A | Slag Storage Pile | New | 29,100 $ft^2$ | None[9] |
| TR11B1 | TR11B1 | Slag Feed Hopper Drop Point | New | 100 TPH | None[9] |
| TR11B2 | TR11B2 | Slag Grizzly Drop Point | New | 100 TPH | None[9] |
| TR11B3 | TR11B3 | Slag Feed Conveyer Belt Drop Point | New | 100 TPH | None[9] |

## Table 1.0: Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description[1] | Year Installed | Design Capacity | Control Device[2] |
|---|---|---|---|---|---|
| TR11B4 | TR11B4 | Slag Metallics Belt Conveyer Drop Point | New | 15 TPH | None[9] |
| TR11B5 | TR11B5 | Slag Triple Deck Metallics Screen Drop Point | New | 15 TPH | None[9] |
| TR11B6 | TR11B6 | Slag Triple Deck Non-Metallics Screen Drop Point | New | 85 TPH | None[9] |
| MTLSCR | MTLSCR | Slag Triple Deck Metallics Screen | New | 15 TPH | None[9] |
| NOMTLSCR | NOMTLSCR | Slag Triple Deck Non-Metallics Screen | New | 85 TPH | None[9] |
| TR11B7 | TR11B7 | Slag Stacking Belt Conveyer 1 Drop Point | New | 3 TPH | None[9] |
| TR11B8 | TR11B8 | Slag Stacking Belt Conveyer 2 Drop Point | New | 3 TPH | None[9] |
| TR11B9 | TR11B9 | Slag Stacking Belt Conveyer 3 Drop Point | New | 43 TPH | None[9] |
| TR11B10 | TR11B10 | Slag Stacking Belt Conveyer 4 Drop Point | New | 14 TPH | None[9] |
| TR11B11 | TR11B11 | Slag Stacking Belt Conveyer 5 Drop Point | New | 14 TPH | None[9] |
| TR11B12 | TR11B12 | Slag Stacking Belt Conveyer 6 Drop Point | New | 14 TPH | None[9] |
| TR11B13 | TR11B13 | C-Scrap Storage Pile Drop Point | New | 3 TPH | None[9] |
| TR11B14 | TR11B14 | B-Scrap Storage Pile Drop Point | New | 3 TPH | None[9] |
| TR11B15 | TR11B15 | A-Scrap Storage Pile Drop Point | New | 9 TPH | None[9] |
| TR11B16 | TR11B16 | Slag Products Storage Pile 1 Drop Point | New | 43 TPH | None[9] |
| TR11B17 | TR11B17 | Slag Products Storage Pile 3 Drop Point | New | 14 TPH | None[9] |
| TR11B18 | TR11B18 | Slag Overs Storage Pile Drop Point | New | 14 TPH | None[9] |
| TR11B19 | TR11B17 | Slag Products Storage Pile 2 Drop Point | New | 14 TPH | None[9] |
| W71B1 - B7 | W71B1- B7 | SPP Storage Piles | New | 74,100 $ft^2$[4] | None[9] |
| TR11B20 - TR11B22 | TR11B20 - TR11B22 | A-Scrap, B-Scrap, and C-Scrap Truck Loading Drop Points | New | 15 TPH | None[9] |
| TR11B23 - TR11B26 | TR11B20 - TR11B22 | Slag Products Truck Loading Drop Points | New | 85 TPH | None[9] |
| **Auxiliary Operations/Equipment** | | | | | |
| ***Emergency Generators/Fire Water Pumps*** | | | | | |
| EGEN1 | EGEN1 | Emergency Generator 1 | New | 1,600 hp | None[10] |
| EFWP1 | EFWP1 | Emergency Fire Water Pump 1 | New | 300 hp | None[10] |
| ***Cooling Towers*** | | | | | |
| CTNC11 | CTNC11a | Non-Contact Cooling Tower 1 - Cell 1 | New | 11,000 gpm | DE |
| | CTNC11b | Non-Contact Cooling Tower 1 - Cell 2 | New | 11,000 gpm | DE |

## Table 1.0: Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description[1] | Year Installed | Design Capacity | Control Device[2] |
|---|---|---|---|---|---|
| CTNC12 | CTNC12a | Non-Contact Cooling Tower 2 - Cell 1 | New | 11,000 gpm | DE |
| | CTNC12b | Non-Contact Cooling Tower 2 - Cell 2 | New | 11,000 gpm | DE |
| CTC1 | CTC1a | Contact Cooling Tower - Cell 1 | New | 5,500 gpm | DE |
| | CTC1b | Contact Cooling Tower - Cell 2 | New | 5,500 gpm | DE |
| ***Fixed Roof Storage Tanks*** | | | | | |
| DSLTK-GEN1 | DSLTK-GEN1 | EGEN1 Diesel Storage Tank | New | 500 gallon | None |
| DSLTK-FWP1 | DSLTK-FWP1 | EFWP1 Diesel Storage Tank | New | 500 gallon | None |
| DSLTK-VEH | DSLTK-VEH | Vehicle Diesel Storage Tank | New | 5,000 gallon | None |

(1) Where "Drop Point" is listed it represents the material transfer point prior to the equipment/storage pile listed (i.e., the unit feed point).

(2) This column does not include pollution prevention technologies/procedures such as Low-$NO_x$ Burners, Good Combustion Practices, or maintaining inherent moisture content for material handling operations. (BH - Baghouse; BV - Bin Vent; DE - Drift Eliminator; ME - Mist Eliminator; PE - Partial Enclosure; SW - Sweeping; WS - Water Spraying)

(3) The ECS Storage Piles are inside the building with an open side for direct dumping from trucks when possible.

(4) The aggregate foot-print area of all listed storage piles must be within this limit. Although listed as specific number of emission points in the permit application, there is no limit on the number of individual piles within each listed grouping.

(5) Sweeping and Water Spraying for haulroads pursuant to 4.1.3(e)(3) and (4).

(6) The EAF, LMS, and Caster produce emissions that are both captured and sent to the EAF Baghouse (BH1) and that are emitted as fugitives emissions through the large vent over the Continuous Caster (CV1). However, to be conservative, all emissions from the Continuous Caster (Teeming Emissions) were assigned to CV1 in the facility-wide PTE.

(7) Natural gas combustion exhaust emissions vent inside the Melt Shop or Rolling Mill building (as applicable) and are assumed all emitted from the vent over the continuous caster (CV1) and the rolling mill building vent (RMV1), respectively. MDHI for these units represents the aggregate limit of all identical units as applicable.

(8) These emission sources are general exhaust vents on the noted buildings, and the maximum design capacity represents the design capacity of the steel processing unit inside the building.

(9) Must maintain sufficient moisture content in material pursuant to 4.1.3(c)(3).

(10) These engines are required to be in compliance with 40 CFR 60, Subpart IIII. Oxidation catalysts may be necessary on some engines to meet the applicable standards.

## 2.0. General Conditions

### 2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

### 2.2. Acronyms

| | | | |
|---|---|---|---|
| **CAAA** | Clean Air Act Amendments | **NSPS** | New Source Performance Standards |
| **CBI** | Confidential Business Information | **PM** | Particulate Matter |
| **CEM** | Continuous Emission Monitor | **$PM_{2.5}$** | Particulate Matter less than 2.5µm in diameter |
| **CES** | Certified Emission Statement | **$PM_{10}$** | Particulate Matter less than 10µm in diameter |
| **C.F.R. *or* CFR** | Code of Federal Regulations | **Ppb** | Pounds per Batch |
| **CO** | Carbon Monoxide | **pph** | Pounds per Hour |
| **C.S.R. *or* CSR** | Codes of State Rules | **ppm** | Parts per Million |
| **DAQ** | Division of Air Quality | **Ppmv or ppmv** | Parts per million by volume |
| **DEP** | Department of Environmental Protection | **PSD** | Prevention of Significant Deterioration |
| **dscm** | Dry Standard Cubic Meter | **psi** | Pounds per Square Inch |
| **FOIA** | Freedom of Information Act | **SIC** | Standard Industrial Classification |
| **HAP** | Hazardous Air Pollutant | **SIP** | State Implementation Plan |
| **HON** | Hazardous Organic NESHAP | **$SO_2$** | Sulfur Dioxide |
| **HP** | Horsepower | **TAP** | Toxic Air Pollutant |
| **lbs/hr** | Pounds per Hour | **TPY** | Tons per Year |
| **LDAR** | Leak Detection and Repair | **TRS** | Total Reduced Sulfur |
| **M** | Thousand | **TSP** | Total Suspended Particulate |
| **MACT** | Maximum Achievable Control Technology | **USEPA** | United States Environmental Protection Agency |
| **MDHI** | Maximum Design Heat Input | **UTM** | Universal Transverse Mercator |
| **MM** | Million | **VEE** | Visual Emissions Evaluation |
| **MMBtu/hr *or* mmbtu/hr** | Million British Thermal Units per Hour | **VOC** | Volatile Organic Compounds |
| **MMCF/hr *or* mmcf/hr** | Million Cubic Feet per Hour | **VOL** | Volatile Organic Liquids |
| **NA** | Not Applicable | | |
| **NAAQS** | National Ambient Air Quality Standards | | |
| **NESHAPS** | National Emissions Standards for Hazardous Air Pollutants | | |
| **$NO_x$** | Nitrogen Oxides | | |

## 2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation; and*

2.3.2. *45CSR14 – Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration.*

## 2.4. Term and Renewal

2.4.1. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

## 2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R14-0040 and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
**[45CSR§13-5.10 and 13-10.3, 45CSR§14-19.2]**

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

## 2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

## 2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

## 2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
**[45CSR§13-4]**

## 2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
**[45CSR§13-5.4.]**

## 2.10. Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
**[45CSR§13-5.1]**

## 2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

## 2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

## 2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

## 2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

## 2.15. Property Rights

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

## 2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

## 2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13 and Section 19.1 of 45CSR14.
**[45CSR§13-10.1, 45CSR§14-19.1]**

## 2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

## 2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

## 3.0. Facility-Wide Requirements

### 3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
**[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
**[45CSR§6-3.2.]**

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
**[40CFR§61.145(b) and 45CSR§34]**

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
**[45CSR§4-3.1 State-Enforceable only.]**

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
**[45CSR§13-10.5.]**

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.
**[45CSR§11-5.2.]**

### 3.2. Monitoring Requirements

3.2.1. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve (12) month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve (12) calendar months. Compliance with all hourly emission limits shall be based, unless otherwise specified, on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method.

## 3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

**[WV Code § 22-5-4(a)(14-15) and 45CSR13]**

## 3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
**[45CSR§4. *State-Enforceable only.*]**

## 3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by email as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director
WVDEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304-2345

**DAQ Compliance and Enforcement[1]:**
DEPAirQualityReports@wv.gov

**If to the US EPA:**

Section Chief
U.S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
Four Penn Center
1600 John F Kennedy Blvd
Philadelphia, PA 19103-2852

[1] For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, notice of Compliance Status Reports, Initial Notifications, etc.

3.5.4. **Operating Fee.**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.4.2. In accordance with 45CSR30 – Operating Permit Program, enclosed with this permit is a Certified Emissions Statement (CES) Invoice, from the date of initial startup through the following June 30. Said invoice and the appropriate fee shall be submitted to this office no later than 30 days prior to the date of initial startup. For any startup date other than July 1, the permittee shall pay a fee or prorated fee in accordance with the Section 4.5 of 45CSR22. A copy of this schedule may be found attached to the Certified Emissions Statement (CES) Invoice.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

## 4.0. Source-Specific Requirements

### 4.1. Limitations and Standards

4.1.1. Only those air emission units/sources as identified in Table 1.0, with the exception of any *de minimis* air emission sources as identified under Table 45-13B of 45CSR13, are authorized at the permitted facility by this permit. In accordance with the information filed in Permit Application R14-0040, the emission units/sources identified under Table 1.0 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.0.

4.1.2. **Steel Production Limit**

The aggregate production of steel in the EAF (EAF1) shall not, on a rolling 12-month basis, exceed 650,000 tons per year as measured as the total tons of molten metal cast (CAST1).

4.1.3. **Material Handling & Storage Operations**

The handling of: (1) slag, (2) raw materials used in the production of steel (scrap steel, carbons, alloys, and other fluxing agents), and (3) EAF Baghouse Dust shall be in accordance with the following requirements:

a. The permittee shall not exceed the specified maximum annual throughputs of the following materials:

**Table 4.1.3(a): Maximum Annual Throughputs**

| Material | Limit | Units |
|---|---|---|
| Scrap Steel | 812,500 | TPY(1) |
| Alloy Aggregates | 9,800 | TPY(1) |
| Fluxing Agents | 35,500 | TPY(1) |
| Carbon | 16,500 | TPY(1) |
| Slag | 65,000 | TPY(2) |

(1) As measured as material unloaded at the facility.
(2) As processed through the Slag Processing Plant.

b. The permittee shall not exceed the specified maximum design capacities of the following material handling process equipment:

**Table 4.1.3(b): Material Handling Equipment Maximum Design Capacity**

| Emission Unit ID | Description | Limit | Units |
|---|---|---|---|
| MTLSCR | Slag Triple Deck Metallics Screen | 15 | TPH |
| NOMTLSCR | Slag Triple Deck Non-Metallics Screen | 85 | TPH |

c. **Material Storage & Handling**

Material Storage & Handling shall be in accordance with the following operating requirements:

(1) The permittee shall, to the extend practicable, minimize the drop heights from all material transfer points;

(2) The permittee shall design and maintain all applicable enclosures as given under Emissions Unit Table 1.0 and Appendix A: Table A-1 so as to achieve the minimum specified control efficiency;

(3) All slag storage, processing, and handling shall be done with the slag maintained at a minimum moisture level that is sufficient to mitigate the fugitive escape of particulate matter. The moisture level may be inherent from the process, acquired through natural means, or, if necessary, from application of water to the slag. At all times, including periods of cold weather, the permittee shall comply with this requirement. This may include utilizing winterization practices if necessary to prevent freezing of any water delivery systems;

(4) Carbon, non-aggregate alloys, and other fluxing agents shall be stored in silos or in enclosed bins with the exception of when these materials are handled inside the Meltshop building. The silos shall utilize bin vent filters to control particulate matter emissions during silo loading;

(5) The aggregate foot-print area of all listed groups of storage piles must be within the limits given in Emission Units Table 1.0.;

(6) The permittee shall not exceed the maximum emission limits for the material handling stack/vent emission points as given under Appendix A: Table A-1 and the material handling non-stack/vent emission points as given under Appendix A: Table A-2; and

(7) The annual aggregate particulate matter emission rate from all storage piles, as calculated in Table A-12 of the Permit Application, shall not exceed 0.53 TPY of $PM_{2.5}$, 3.48 TPY of $PM_{10}$, 6.96 TPY of total particulate matter, and 6.96 TPY of filterable particulate matter. Compliance with these emission limits are based on meeting the requirements under 4.1.1, 4.1.3(c)(3), and 4.1.3(c)(5).

d. A visible and/or audible warning device shall be installed on the EAF Baghouse Storage Silo to warn operators when the silo is full so that the silo is not overloaded. The silo shall not be overloaded at any time. All particulate material retrieved from the EAF Baghouse shall be handled in a manner that will prevent excess material from becoming airborne into the atmosphere;

e. **Haulroads and Mobile Work Areas**
Fugitive particulate emissions resulting from use of haulroads and mobile work areas shall be minimized by the following:

(1) The permittee shall perform all necessary tasks to adequately maintain paved haulroads and paved mobile work areas (including a reasonable shoulder area) within the plant boundary;

(2) All unpaved roads and mobile work areas shall be graded with gravel, slag, or a similar material so as to provide a suitable surface for the use of trucks and other heavy equipment. Unpaved roads and mobile work areas shall be provided with additional material as needed to maintain the road surface;

(3) The permittee shall, in a timely fashion, collect material spilled on paved haulroads that could become airborne if it dried or were subject to vehicle traffic and shall utilize, or contract with a third party to utilize, a vacuum sweeper truck or a mechanical sweeper truck, in good operating condition, and shall utilize same as needed to remove excess dirt and dust from all paved haulroads and mobile work areas. If needed, the haulroads and mobile work areas shall be flushed with water prior to vacuum sweeping to remove larger pieces of debris;

(4) The permittee shall maintain a water truck on site, or contract with a third party to bring a water truck on site as often as is necessary, and shall utilize same to apply water, or an environmentally acceptable dust control solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from haulroads and other work areas where mobile equipment is used. The water trucks shall be designed, maintained, and operated so as to provide adequate coverage to the area being treated. At all times, including periods of cold weather, the permittee shall comply with the water truck requirements of this permit. This may include utilizing winterization practices if necessary to prevent freezing of the water delivery system on the truck;

(5) A maximum speed limit of 15 miles per hour shall be maintained on all unpaved haulroads. Clear and visible signs shall be posted displaying this speed limit wherever necessary to ensure compliance with this requirement; and

(6) The annual aggregate particulate matter emission rate from all haulroad and mobile work area activity, as calculated in Table A-14 in the Permit Application, shall not exceed 0.25 TPY of $PM_{2.5}$, 1.94 TPY of $PM_{10}$, 7.73 TPY of total particulate matter, and 7.73 TPY of filterable particulate matter. Compliance with these emission limits are based on meeting the requirements given under 4.1.3(a) and 4.1.3(e)(1) through (4).

f. **45CSR7**

The material handling sources identified under Emission Units Table 1.0 shall comply with all applicable requirements of 45CSR7 including, but not limited to, the following:

(1) No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.
**[45CSR§7-3.1]**

(2) The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
**[45CSR§7-3.2]**

(3) No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule.
**[45CSR§7-4.1]**

(4) No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate

matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
**[45CSR§7-5.1]**

4.1.4. **Melt Shop**

The emission units/sources in the Melt Shop shall meet the following requirements:

a. **EAF/LMS**

The EAF (identified as EAF1) and LMS (identified as LMS1) shall not exceed the aggregate emission limits in the following table, as emitted from the associated baghouse (BH1-BH), and shall utilize the specified BACT Technology, as given in the following table (the emission limits are in effect during all periods of operation):

**Table 4.1.4(a): EAF/LMS Emission Limits**

| Pollutant | BACT Limit | BACT Technology(1) | PPH | TPY |
|---|---|---|---|---|
| **CO** | 4.00 lb/ton-steel(2) | GCP(3) | 936.00 | 1,300.00 |
| **$NO_x$** | 0.30 lb/ton-steel(2) | GCP(3) | 45.63 | 97.50 |
| **$PM_{2.5}$/$PM_{10}$/$PM_{TOT}$(4)** | 0.0052 gr/dscf | DEC (EAF), LMS Roof, Canopy Hood, Baghouse | 29.92 | 131.03 |
| **$PM_{FILT}$(5)** | 0.0018 gr/dscf | | 10.36 | 45.36 |
| **$SO_2$** | 0.30 lb/ton-steel | Scrap Management Plan(6) | 49.14 | 97.50 |
| **VOCs** | 0.30 lb/ton-steel | Scrap Management Plan(6)/ GCP(3) | 35.10 | 97.50 |
| **Lead** | n/a | Not Subject to BACT | 0.19 | 0.52 |
| **Fluorides(7)** | 0.01 lb/ton-steel | DEC (EAF), LMS Roof, Canopy Hood, Baghouse | 1.17 | 3.25 |
| **Total HAPs** | n/a | Not Subject to BACT | 0.83 | 2.31 |
| **$CO_2e$** | TPY Limit | See 4.1.4(c)(6) | n/a | 119,513 |

(1) DEC = Direct-shell Evacuation Control System; LMS Roof includes evacuation system similar to DEC; GCP = Good Combustion Practices
(2) Compliance based on a 30-day rolling average.
(3) For the purposes of this permit, "Good Combustion Practices (GCP)" are defined to include, but are not limited to the following: (1) maintaining a proper oxidizing atmosphere to control emissions through proper combustion tuning, temperature, and air/fuel mixing and (2) activities such as maintaining operating logs and record-keeping, conducting training, ensuring maintenance knowledge, performing routine and preventive maintenance, conducting control adjustments, monitoring fuel quality, etc.
(4) Includes condensable particulate matter.
(5) Filterable particulate matter only.
(6) For the purposes of this permit, "Scrap Management Plan" is defined as being in compliance with the Scrap Management Requirements under 40 CFR 63, Subpart YYYYY and the use of commercially available low residue, pre-processed, and inspected scrap.
(7) Excluding Hydrogen Fluoride

b. **Melt Shop Fugitive Emissions**

The aggregate uncaptured fugitive emissions from the Meltshop building, as generated by the EAF (EAF1), the LMS (LMS1), and the Continuous Caster (CAST1), and as emitted from CV1, shall not exceed the limits given in the following table (these limits do not include the natural gas combustion exhaust emissions from various sources listed under Table 4.1.5(a)):

**Table 4.1.4(b): EAF/LMS/Caster Fugitive Emission Limits[1][2][3]**

| Pollutant | Source | PPH | TPY |
|---|---|---|---|
| **CO** | EAF1/LMS1 | 2.35 | 3.26 |
| **$NO_x$** | EAF1/LMS1 | 0.11 | 0.24 |
| **$PM_{2.5}/PM_{10}/PM_{TOT}$[4]** | EAF1/LMS1 | 0.37 | 1.64 |
| | Caster Teeming[5] | 0.82 | 2.28 |
| **$PM_{FILT}$[6]** | EAF1/LMS1 | 0.13 | 0.57 |
| | Caster Teeming[5] | 0.82 | 2.28 |
| **$SO_2$** | EAF1/LMS1 | 0.12 | 0.24 |
| **VOCs** | EAF1/LMS1 | 0.09 | 0.24 |
| | Caster Teeming[5] | 0.02 | 0.07 |
| **Lead** | EAF1/LMS1 | 2.30e-03 | 6.50e-03 |
| **Fluoride** | EAF1/LMS1 | 1.50e-02 | 4.10e-02 |
| **Total HAPs** | EAF1/LMS1 | 2.08e-03 | 5.78e-03 |
| **$CO_2e$** | EAF1/LMS1 | -- | 300 |

(1) As the BACT emission limits/technologies for the fugitive emissions from EAF/LMS are directly calculated from the BACT emission limits/technologies given under Table 4.1.4(a), compliance with the BACT emission limits/technologies under Table 4.1.4(a) represents compliance with BACT for the fugitive emissions from those units.

(2) EAF/LMS fugitive particulate matter emissions based on the worst-case emissions scenario during melting, refining, and ECS charging operations when the DEC and LMS furnace roof are engaged. During those times, the fugitive emissions are calculated based on a DEC/LMS Hood capture efficiency (CE) of 95%, a canopy hood CE of 95%, and a building CE of 90%. EAF/LMS fugitive non-particulate matter emissions based on the worst-case emissions scenario during melting, refining, and ECS charging operations when the DEC and LMS furnace roof are engaged. During those times, the fugitive emissions are calculated based on a DEC/LMS Hood capture efficiency (CE) of 95% and a canopy hood CE of 95%.

(3) All natural gas combustion sources that exhaust in the Melt Shop building are considered fugitive and emitted from CV1. These limits are given under Table 4.1.5(a).

(4) Includes condensable particulate matter.

(5) BACT for Caster Teeming is 0.007 lb/ton for all particulate matter and 0.0002 lb-VOC/ton.

(6) Filterable particulate matter only.

c. **EAF/LMS/Casting Operating Requirements**

The EAF/LMS and Continuous Caster shall be operated according to the following requirements:

(1) The permittee shall use the endless charging system (ECS) to charge scrap to the EAF without opening the roof of the furnace at all times except during necessary bucket charge events or during other necessary maintenance or upset situations;

(2) During melting and ECS charging operations in the EAF, when the roof is closed, the permittee shall utilize a direct-shell evacuation control (DEC) system designed and operated to achieve a minimum capture efficiency of 95% of all potential particulate matter emissions from the EAF and evacuate the exhaust to the EAF Baghouse. Pursuant to 40 CFR 60, Subpart AAa, a DEC system means a system that maintains a negative pressure within the EAF above the slag or metal and ducts emissions to the EAF baghouse;

(3) The permittee shall utilize a roof on the LMS that includes an evacuation system at all times the electrodes are being used in the molten bath that is designed and operated to achieve a minimum capture efficiency of 95% of all potential particulate matter emissions from the LMS and evacuate the exhaust to the EAF Baghouse;

(4) The permittee shall utilize a roof canopy hood designed and operated to achieve a minimum capture efficiency of 95% of all potential fugitive particulate matter emissions from the EAF/LMS (that are not captured by the DEC or LMS roof evacuation system );

(5) The permittee shall operate control equipment and/or implement work practice standards as reasonable precautions to prevent particulate matter from becoming airborne and exiting any opening from the Melt Shop building into the open air so as to achieve a minimum capture efficiency of 90% of all potential fugitive particulate matter emissions from the EAF/LMS and Continuous Caster (CAST1). This includes utilizing practices to mitigate any fugitive escape of particulate or gaseous emissions from any Meltshop opening other than CV1.

(6) To comply with GHG BACT on the EAF/LMS, the permittee shall implement the technically feasible technologies and work practices given in Table 23-7 of the permit application and including summarized in the following:

i. Employ foamy slag practices to reduce radiation heat losses and increase the electric power efficiency of the EAF;

ii. Use of oxy-fuel injectors to reduce the consumption of electricity and electrode material;

iii. Use of post-combustion to utilize the chemical energy in the CO to preheat scrap;

iv. Use of controlled microstructure or other engineered refractories to reduce ladle leakages and formation of slag during transfer operations;

v. Use of eccentric bottom tapping or similar methods to reduce refractory and electrode consumption, and improve ladle life;

vi. Use of bottom stirring (injecting an inert gas into the bottom of the LMS) or similar methods, as practicable, to increase the heat transfer in a melt;

vii. Use of ultra-high-power (UHP), or similar, transformers to reduce energy loss through modern design;

viii. When practicable, use of variable speed drives to lower the speed of the dust collection fans to achieve a power consumption savings;

ix. Use of a modem control and monitoring system which integrates real-time monitoring of the process variables such as steel bath temperature, carbon levels along with real-time control systems for carbon injection and lance oxygen practice; and

x. Use of scrap preheating as the primary method of operation to reduce power consumption of the EAF by using the off-gases of the EAF as the energy source for the preheat operation.

d. **Binder Usage**
The use of binder for refractory repair in the Ladle and Tundish shall not exceed an aggregate annual limit of 12.03 tons/yr.

e. **45CSR7**
The EAF/LMS and Continuous Caster shall comply with all applicable requirements of 45CSR7 including, but not limited to, the following:

(1) No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.
**[45CSR§7-3.1]**

(2) The provisions of subsection 3.1 shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
**[45CSR§7-3.2]**

(3) No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A found at the end of this rule.
**[45CSR§7-4.1]**

(4) No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
**[45CSR§7-5.1]**

f. **45CSR10**
The Emission Point BH1 is subject to the applicable limitations and standards under 45CSR10, including the requirements given below:

(1) No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in subdivisions 4.1.a through 4.1.e.
**[45CSR§10-4.1]**

(2) Compliance with the allowable sulfur dioxide concentration limitations from manufacturing process source operation(s) set forth in this rule shall be based on a block three (3) hour averaging time.
**[45CSR§10-4.2]**

g. **40 CFR 60, Subpart AAa**
The EAF shall comply with all applicable requirements of 40 CFR 60, Subpart AAa including, but not limited to, the following standards:

(1) **§ 60.272a Standard for particulate matter.**

i. On and after the date of which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from an EAF or an AOD vessel any gases which:
**[40 CFR§60.272a(a)]**

(A) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);
**[40 CFR§60.272a(a)(1)]**

(B) Exit from a control device and exhibit 3 percent opacity or greater; and
**[40 CFR§60.272a(a)(2)]**

(C) Exit from a shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.
**[40 CFR§60.272a(a)(3)]**

ii. On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the dust-handling system any gases that exhibit 10 percent opacity or greater.
**[40 CFR§60.272a(b)]**

h. **40 CFR 63, Subpart YYYYY**
The EAF shall comply with all applicable requirements of 40 CFR 63, Subpart YYYYY including, but not limited to, the following standards:

(1) **§63.10685 What are the requirements for the control of contaminants from scrap?**

i. **Chlorinated plastics, lead, and free organic liquids.** For metallic scrap utilized in the EAF at your facility, you must comply with the requirements in either paragraph (a)(1) or (2) of this section. You may have certain scrap at your facility subject to paragraph (a)(1) of this section and other scrap subject to paragraph (a)(2) of this section provided the scrap remains segregated until charge make-up.
**[40 CFR§63.10685(a)]**

(A) **Pollution prevention plan**. For the production of steel other than leaded steel, you must prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, you must prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. You must submit the scrap pollution prevention plan to the permitting authority 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 permitting 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 permitting authority. You must keep a copy of the plan onsite, and you must provide training on the plan's requirements to all plant personnel with materials acquisition

or inspection duties. Each plan must include the information in paragraphs (a)(1)(i) through (iii) of this section:
**[40 CFR§63.10685(a)(1)]**

(1) Specifications that scrap materials must be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.
**[40 CFR§63.10685(a)(1)(i)]**

(2) A requirement in your scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.
**[40 CFR§63.10685(a)(1)(ii)]**

(3) Procedures for determining if the requirements and specifications in paragraph (a)(1) of this section are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.
**[40 CFR§63.10685(a)(1)(iii)]**

(4) The requirements of paragraph (a)(1) of this section do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials must be identified in the pollution prevention plan.
**[40 CFR§63.10685(a)(1)(iv)]**

(B) **Restricted metallic scrap.** For the production of steel other than leaded steel, you must not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, you must not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if you meet the requirements in paragraph (b)(3) of this section.
**[40 CFR§63.10685(a)(2)]**

ii. **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.
**[40 CFR§63.10685(b)]**

(A) **Site-specific plan for mercury switches**. You must comply with the requirements in paragraphs (b)(1)(i) through (v) of this section.
**[40 CFR§63.10685(b)(1)]**

(1) You must include a requirement in your scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.
**[40 CFR§63.10685(b)(1)(i)]**

(2) 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 permitting authority for approval. You must operate according to this 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 permitting 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 permitting authority. The permitting authority may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan must include:
**[40 CFR§63.10685(b)(1)(ii)]**

(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 that 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 permitting 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;
**[40 CFR§63.10685(b)(1)(ii)(A)]**

(B) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;
**[40 CFR§63.10685(b)(1)(ii)(B)]**

(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
**[40 CFR§63.10685(b)(1)(ii)(C)]**

(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).
**[40 CFR§63.10685(b)(1)(ii)(D)]**

(3) 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 your facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time.
**[40 CFR§63.10685(a)(1)(iii)]**

(4) You must establish a goal for each scrap provider 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 permitting authority 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.
**[40 CFR§63.10685(a)(1)(iv)]**

(5) For each scrap provider, you must submit semiannual progress reports to the permitting authority 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 aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.
**[40 CFR§63.10685(a)(1)(v)]**

(B) **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 Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law 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 paragraph (b)(2)(iii) of this section.
**[40 CFR§63.10685(b)(2)]**

(1) 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;
**[40 CFR§63.10685(b)(2)(i)]**

(2) The program has a goal to remove at least 80 percent of mercury switches from the 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
**[40 CFR§63.10685(b)(2)(ii)]**

(3) 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.
**[40 CFR§63.10685(b)(2)(iii)]**

(4) You must develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.
**[40 CFR§63.10685(b)(1)(iv)]**

(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.
**[40 CFR§63.10685(b)(2)(iv)(A)]**

(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 of mercury switches from end-of-life vehicles. Upon the request of the permitting 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.
**[40 CFR§63.10685(b)(2)(iv)(B)]**

(C) You must conduct periodic inspections or provide 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.
**[40 CFR§63.10685(b)(2)(iv)(C)]**

(2) **§63.10686 What are the requirements for electric arc furnaces and argon-oxygen decarburization vessels?**

i. You must install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and argon-oxygen decarburization (AOD) vessel and conveys the collected emissions to a control device for the removal of particulate matter (PM). **[40 CFR§63.10686(a)]**

ii. Except as provided in paragraph (c) of this section, you must not discharge or cause the discharge into the atmosphere from an EAF or AOD vessel any gases which:
**[40 CFR§63.10686(b)]**

(A) Exit from a control device and contain in excess of 0.0052 grains of PM per dry standard cubic foot (gr/dscf); and
**[40 CFR§63.10686(b)(1)]**

(B) Exit from a melt shop and, due solely to the operations of any affected EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater.
**[40 CFR§63.10686(b)(2)]**

### 4.1.5. Natural Gas Combustion Units

The natural gas/propane-fired units identified in Appendix A: Table A-3 shall operate according to the following requirements:

a. Each unit shall be fired by Pipeline-Quality Natural Gas (PNG) or Liquid Petroleum Gas (LPG), shall not exceed the MDHI as given under Table 1.0 of this permit, shall not exceed the maximum emission limits given under Appendix A: Table A-3, and shall comply with the BACT requirements given in the following table;

**Table 4.1.5(a): Natural Gas/Propane Combustion BACT**

| Pollutant | Fuel Source | BACT Limit | BACT Technology(1) |
|---|---|---|---|
| **CO** | LPG | 0.082 lb/mmBtu | Good Combustion Practices |
| | PNG | | |
| **$NO_x$** | LPG | 0.14 lb/mmBtu | LNB, Good Combustion Practices |
| | PNG | 0.098 lb/mmBtu | |
| **$PM_{2.5}$/$PM_{10}$/PM(2)** | LPG | 0.0077 lb/mmBtu | Use of LPG/PNG, Good Combustion Practices |
| | PNG | 0.0075 lb/mmBtu | |
| **$PM_{FILT}$(3)** | LPG | 0.0022 lb/mmBtu | |
| | PNG | 0.0019 lb/mmBtu | |
| **$SO_2$** | LPG | 0.011 lb/mmBtu | Use of LPG/PNG |
| | PNG | 0.00059 lb/mmBtu | |
| **VOCs** | LPG | 0.0087 lb/mmBtu | Good Combustion Practices |
| | PNG | 0.0054 lb/mmBtu | |
| **$CO_2e$** | LPG | TPY Limits in Table A-3 | Use of LPG/PNG, Good Combustion Practices |
| | PNG | | |

(1) LNB = Low-$NO_x$ Burning Technology. For the purposes of this permit, "Good Combustion Practices" are defined to include, but are not limited to the following: (1) maintaining a proper oxidizing atmosphere to control emissions through proper combustion tuning, temperature, and air/fuel mixing and (2) activities such as maintaining operating logs and record-keeping, conducting training, ensuring maintenance knowledge, performing routine and preventive maintenance, conducting burner and control adjustments, monitoring fuel quality, etc.

(2) Includes condensable particulate matter.
(3) Filterable particulate matter only.

b. The aggregate amount of annual fuel combusted in all of the units listed under Table A-3 of the Permit Application shall not exceed 542,000 mmBtu/yr as based on the High Heating Value of the amount of LPG or PNG combusted.

### 4.1.6. Storage Tanks

Use of the fixed roof storage tanks shall be in accordance with the following:

a. Tank capacity shall be limited as specified under Table 1.0 of this permit;

b. The aggregate emissions of VOCs from all fixed roof storage tanks (DSLTK-GEN1, DSLTK-FWP1, and DSLTK-VEH) shall not exceed a BACT Limit of 9.00 pounds/year;

c. The aggregate annual throughput of diesel through all storage tanks shall not exceed 300,000 gallons/year;

d. For each storage tank the permittee shall, for purposes of BACT, meet the following requirements:

(1) Utilize good operating practices in the operation of the storage tanks. Good operating practices shall mean maintaining and operating the storage tanks according to manufacturer's recommendations and regularly inspecting the tanks for areas of disrepair or failure that would allow the escape of pollutant-containing vapors.

(2) Maintain a white or aluminum color on all storage tank surfaces that are exposed to the sun to mitigate heat absorption of the tanks; and

(3) Utilize submerged fill on all tanks.

### 4.1.7. Cooling Towers

The Cooling Towers shall operate in accordance with the following requirements:

a. The Cooling Towers shall use the control device specified under Section 1.0 at all times in operation, and shall not exceed the specified maximum design and operational limits given in the following table:

**Table 4.1.8(a): Cooling Tower Specifications**

| ID No. | Max Design Capacity Water Circulation Pump (gal/min) | Total Dissolved Solids (ppm) | Mist Eliminator Max Drift Rate (%)[(1)] |
|---|---|---|---|
| CTNC11 (Cell1) | 11,000 | 2,000 | 0.0010 |
| CTNC11 (Cell2) | 11,000 | 2,000 | 0.0010 |
| CTNC12 (Cell1) | 11,000 | 2,000 | 0.0010 |

| ID No. | Max Design Capacity Water Circulation Pump (gal/min) | Total Dissolved Solids (ppm) | Mist Eliminator Max Drift Rate (%)(1) |
|---|---|---|---|
| CTNC12 (Cell2) | 11,000 | 2,000 | 0.0010 |
| CTC1 (Cell1) | 5,500 | 2,000 | 0.0010 |
| CTC1 (Cell2) | 5,500 | 2,000 | 0.0010 |

(1) As based on manufacturer or vendor guarantee or applicable product literature.

b. The Cooling Towers shall not exceed the emission limits given in the following table:

**Table 4.1.8(b): Cooling Tower Emission Limits**

| ID No. | $PM_{2.5}$ | | $PM_{10}$ | | $PM_{TOT}$(1)/$PM_{FILT}$(2) | |
|---|---|---|---|---|---|---|
| | PPH | TPY | PPH | TPY | PPH | TPY |
| CTNC11 (Cell1) | 0.01 | 0.01 | 0.08 | 0.33 | 0.11 | 0.48 |
| CTNC11 (Cell2) | 0.01 | 0.01 | 0.08 | 0.33 | 0.11 | 0.48 |
| CTNC12 (Cell1) | 0.01 | 0.01 | 0.08 | 0.33 | 0.11 | 0.48 |
| CTNC12 (Cell2) | 0.01 | 0.01 | 0.08 | 0.33 | 0.11 | 0.48 |
| CTC1 (Cell1) | 0.01 | 0.01 | 0.04 | 0.16 | 0.06 | 0.24 |
| CTC1 (Cell2) | 0.01 | 0.01 | 0.04 | 0.16 | 0.06 | 0.24 |

(1) Total particulate matter including filterable and condensable.
(2) Filterable particulate matter only.

c. BACT for all Cooling Towers listed under Table 4.1.8(a) is the PPH limit as based on the use of a High Efficiency Drift Eliminator with a maximum drift rate of 0.001%.

### 4.1.8. Emergency Engines

The Emergency Engines, identified as EGEN1 through EFWP1, shall meet the following requirements:

a. EGEN1 shall not exceed 1,600 horsepower and meet the requirements of an Emergency ICE under 40 CFR 60, Subpart IIII. EFWP1 shall not exceed 300 hp and shall meet the requirements of an Emergency Fire Pump Engine under 40 CFR 60, Subpart IIII. Both units shall be fired only with diesel fuel that does not exceed a maximum sulfur content of 15 ppm pursuant to §60.4207(b);

b. Each unit shall not operate in excess of 100 hours per year in non-emergency/fire situations (there are no operational use restrictions during times of emergency or fire). EGEN1 shall further meet the operational use requirements given under §60.4211(f);

c. The Emergency Generator (EGEN1) shall not exceed the emission limits and shall meet the BACT requirements given in the following table:

**Table 4.1.8(c): Emergency Generator (EGEN1) Emission Limits**

| Pollutant | BACT Limit | BACT Technology | PPH | TPY |
|---|---|---|---|---|
| **CO** | 2.61 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 9.21 | 0.46 |
| **$NO_x$** | 2.78 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 9.82 | 0.49 |
| **$PM_{2.5}$(2)** | 0.15 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 0.53 | 0.03 |
| **$PM_{10}$(2)** | 0.15 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 0.53 | 0.03 |
| **$PM_{FILT}$(3)** | 0.15 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 0.53 | 0.03 |
| **PM(4)** | n/a | n/a | 0.53 | 0.03 |
| **$SO_2$** | PPH | Annual Hrs of Op(1) Limit | 0.01 | 0.01 |
| **VOCs** | 0.20 g/hp-hr | Subpart IIII Certification, Annual Hrs of Op(1) Limit | 0.70 | 0.04 |
| **Total HAPs** | n/a | n/a | 0.01 | 0.01 |
| **$CO_2e$** | TPY | Annual Hrs of Op(1) Limit | 1,832 | 92 |

(1) Non-emergency hours of operation.
(2) Includes condensable particulate matter.
(3) Filterable particulate matter only.
(4) Filterable and condensable particulate matter.

d. The Emergency Fire Water Pump (EFWP1) shall not exceed the emission limits and shall meet the BACT requirements given in the following table:

**Table 4.1.9(d): Emergency Fire Water Pump (EFWP1) Emission Limits**

| Pollutant | BACT Limit | BACT Technology | PPH | TPY |
|---|---|---|---|---|
| **CO** | 2.61 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 1.73 | 0.09 |
| **$NO_x$** | 2.78 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 1.84 | 0.09 |
| **$PM_{2.5}$(2)** | 0.15 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 0.10 | 0.01 |
| **$PM_{10}$(2)** | 0.15 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 0.10 | 0.01 |
| **$PM_{FILT}$(3)** | 0.15 g/hp-hr | Subpart IIII Certification Annual Hrs of Op(1) Limit | 0.10 | 0.01 |
| **PM(4)** | n/a | n/a | 0.10 | 0.01 |

| Pollutant | BACT Limit | BACT Technology | PPH | TPY |
|---|---|---|---|---|
| **$SO_2$** | PPH | Annual Hrs of Op(1) Limit | 0.01 | 0.01 |
| **VOCs** | 0.20 g/hp-hr | Subpart IIII Certification, Annual Hrs of Op(1) Limit | 0.13 | 0.01 |
| **Total HAPs** | n/a | n/a | 0.01 | 0.01 |
| **$CO_2e$** | TPY | Annual Hrs of Op(1) Limit | 343 | 17 |

(1) Non-emergency hours of operation.
(2) Includes condensable particulate matter.
(3) Filterable particulate matter only.
(4) Filterable and condensable particulate matter.

e. **40 CFR 60, Subpart IIII**

The Emergency Generator and the Emergency Fire Pump Engine shall meet all applicable requirements under 40 CFR 60, Subpart IIII including the following:

(1) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
**[40 CFR §60.4205(b)]**

(2) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.
**[40 CFR §60.4205(c)]**

**Table 4 to Subpart IIII of Part 60 - Emission Standards for Stationary Fire Pump Engines**

| Maximum engine power | Model year(s) | Emission standards | | |
|---|---|---|---|---|
| | | NMHC + $NO_x$ | CO | PM |
| 225≤KW<450 (300≤HP<600) | 2009+(3) | 4.0 (3.0) | 3.5 (2.6) | 0.20 (0.15) |

(3) In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

**[40 CFR 60, Subpart IIII, Table 4]**

(3) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
**[40 CFR §60.4202(a)]**

(i) For engines with a rated power greater than or equal to 37 KW (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.
**[40 CFR §60.4202(a)(2)]**

f. **40 CFR 63, Subpart ZZZZ**
An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart IIII, for spark ignition engines. No further requirements apply for such engines under this part.
**[40 CFR §63.6590(c)]**

(1) A new or reconstructed stationary RICE located at an area source;
**[40 CFR §63.6590(c)(1)]**

## 4.1.9. Control Devices

a. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
**[45CSR§13-5.11.]**

b. **Fabric Filters/Bin Vents/Baghouses**
Use of Fabric Filters/Bin Vents/Baghouses shall be in accordance with the following requirements:

(1) The permittee shall continuously monitor the differential pressure drop of baghouse BH1-BH so as to ensure proper continuous operation of the baghouse according to the following requirements:

(i) The monitoring system shall include an alarm to notify the control room if the differential pressure drop indicates abnormal performance of the unit. The range of acceptable pressure drops shall be based on the range recommended by the baghouse manufacturer or as defined during the most recent stack test; and

(ii) The frequency of data recording shall be, at a minimum, once every 15 minutes.

(2) Baghouse BH1-BH shall meet all applicable requirements given under 40 CFR 60, Subpart AAa; and

(3) The filter material of all Fabric Filters/Bin Vents/Baghouses shall be checked for defects and/or replaced on a reasonable schedule developed by the permittee or as based on manufacture's recommendations.

c. **Melt Shop Particulate Matter Collection Systems**
At a minimum of once per twelve (12) month period, the permittee shall thoroughly inspect the melt shop particulate matter collection systems to determine if the hooding and duct systems are effective in capturing emissions from the intended equipment and in preventing excess fugitive emissions from the building. All holes, cracks, and other conditions that would substantially reduce the collection efficiency of the emission capture system shall be fixed as early as practicable. The results of the inspection and any corrective action taken shall be recorded pursuant to section 4.4.1. Any inspection performed pursuant to 40 CFR §60.274a(d) shall count toward compliance with 4.1.9(c).

4.1.10 **Additional GHG BACT Requirements**

In addition to the GHG BACT requirements specified elsewhere in this permit, the permittee shall meet the following requirements:

a. Develop and implement training programs and good housekeeping programs help to decrease energy consumption throughout the plant;

b. Develop and implement energy monitoring and management systems help provide for optimal energy recovery and distribution between processes at the plant; and

c. Across all plant operations, where determined to be appropriate by the permittee, utilize energy efficient devices (e.g., motors, drives, pumps, fans, compressors, controls, lights, etc.);

d. The permittee shall, within 60 days of plant startup, submit for review and approval to the Director a GHG BACT Implementation Plan that describes the method of implementation of the requirements given under (a) through (c) above. The plan will include specifics on actions taken to meet the requirements including training methods, use of specific energy efficient devices, O&M procedures, etc. This plan will thereafter be maintained on-site and updated as needed.

4.1.11. **Applicable Rules**

The permittee shall meet all applicable requirements, including those not specified above, as given under 45CSR7, 45CSR10, 40 CFR 60, Subparts AAa, and IIII, and 40 CFR 63, Subparts ZZZZ and YYYYY. All state and federal statutory language cited in this permit is included for clarity and convenience, and all final determinations of compliance with the rules in question shall be enforced based on the complete rule including any corrections to the statutory language cited in this permit. Any final revisions (when published in the federal register) made to the statutory language included herein, where applicable, shall supercede those sections specifically cited in this permit.

4.1.12. **Stack Parameters**

The emission point stack parameters (Inner Diameter, Emission Point Elevation, and UTM Coordinates) shall be in accordance with the specifications as given on the Emission Points Data Sheet (Attachment J) in the most updated version of Permit Application R14-0040. If needed, and granted prior approval by the Director, the permittee may provide information to show that as-built variations in the stack parameters will not result in any substantive changes to the results of the air impacts analysis required under §45-14-9 and §45-14-10.

4.1.13. **Restricted Access**

The permittee shall restrict public access to all areas inside the plant boundary (as defined by the "fenceline" submitted in the Air Dispersion Modeling Report) using, as necessary, physical fencing, signage at all entry and exit points, remote monitoring (e.g., 24-hour video surveillance), and on-site security staffing. All fencing shall be regularly inspected for deterioration and any required repairs shall take place as soon as is reasonably practicable.

## 4.2. Monitoring, Compliance Demonstration, Recording and Reporting Requirements

4.2.1. **Maximum Design Capacity Compliance**

Compliance with the maximum design capacity limitations as given under Table 1.0 and Section 4.1. shall be based, when available, on a clear and visible boilerplate rating or on product literature, manufacturer's data, or equivalent documentation that shows that the specific emission unit(s) or processing line in question is limited by design to a throughput or production rate (or bottlenecked to

that capacity by another unit's design capacity) that does not exceed the specified value under Table 1.0 and Section 4.1. Where the above is not available, if requested by the Director, compliance shall be based on a reasonable demonstration that the listed quantity represents the maximum capacity of the unit/process under the plants normal operational configuration.

4.2.2. **Maximum Design Heat Input Compliance**

Compliance with the various combustion unit MDHI limitations as given under Table 1.0 and Section 4.1. shall be based on a clear and visible boilerplate rating or on product literature, manufacturer's data, or equivalent documentation that shows that the specific emission unit(s) in question is limited by design to an MDHI that does not exceed the specified value under Table 1.0 and Section 4.1.

4.2.3. **Quantities Monitored/Recorded**

To determine continuous compliance with maximum production, throughputs, and other limits given in Section 4.1 of the permit, the permittee shall monitor and record the following:

**Table 4.2.3: Facility Quantities Monitored/Recorded**

| Quantity Monitored/Recorded | Emission Unit(s) | Permit Citation | Units | Period |
|---|---|---|---|---|
| Steel Production | EAF/LMS | 4.1.2 | Tons | Monthly, 12-Month Rolling Total |
| Scrap Steel<br>Carbon<br>Alloys<br>Slag | Various(1) | 4.1.3(a) | Tons | Monthly, 12-Month Rolling Total |
| Binder Usage | LB1, TB1 | 4.1.4(d) | Tons | Monthly, 12-Month Rolling Total |
| PNG/LPG Usage | Appendix A: Table A-3 (all) | 4.1.5(b) | mmBtu | Monthly, 12-Month Rolling Total |
| Diesel Throughput | DSLTK-GEN1<br>DSLTK-FWP1<br>DSLTK-VEH | 4.1.6(c) | Gallons | Monthly, 12-Month Rolling Total |
| Non-Emergency Hours of Operation | EGEN1<br>EFWP1 | 4.1.8(b) | Hours | Monthly, 12-Month Rolling Total |

(1) The amount of each material brought into the facility.

4.2.4. **EAF/LMS CEMS (BH1)**

Within 60 days after achieving the maximum design steel production rate at which the facility will be operated, but not later than 180 days after initial startup, the permittee shall, to show continuous compliance with the CO and $NO_x$ emission limits as given under Table 4.1.4(a), install and operate a Continuous Emissions Monitoring System (CEMS) for monitoring the emissions of CO and $NO_x$, from BH1. The CEMS shall be installed, maintained, and operated according to the manufacturers design, specifications, and recommendations, of which a protocol shall be developed by the permittee and approved by the Director prior to the testing/calibration required below. The CEMS shall meet the applicable performance specifications required by 40 Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR 60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F, 5.1.1, 5.1.3, and 5.1.4, the permittee may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on the CEMS at least once every three (3) years. The permittee shall conduct Cylinder Gas Audits (CGA)

each calendar quarter during which a RAA or a RATA is not performed. Data recorded by the CEMS shall be kept for a period not less than five (5) years and shall be made available to the Director or his/her representative upon request.

Any CEMS exceedance of a permit limit must be reported in writing to the Director of the DAQ as soon as practicable, but no longer than ten (10) calendar days after the occurrence, and shall include, at a minimum, the following information: the relative CEMS data, the cause or suspected cause of the exceedance, and any corrective measures taken or planned.

4.2.5. **40 CFR 60, Subpart AAa**

The EAF shall comply with all applicable Monitoring, Compliance Demonstration, Recording and Reporting Requirements of 40 CFR 60, Subpart AAa including, but not limited to, the following requirements:

a. **§ 60.273a Emissions Monitoring.**

(1) Except as provided under paragraphs (b) and (c) of this section, a continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this subpart.
**[40 CFR§60.273a(a)]**

(2) No continuous monitoring system shall be required on any control device serving the dust-handling system.
**[40 CFR§60.273a(b)]**

(3) A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device(s) is not required on any modular, multi-stack, negative-pressure or positive-pressure fabric filter if observations of the opacity of the visible emissions from the control device are performed by a certified visible emission observer; or on any single-stack fabric filter if visible emissions from the control device are performed by a certified visible emission observer and the owner installs and continuously operates a bag leak detection system according to paragraph (e) of this section. Visible emission observations shall be conducted at least once per day for at least three 6-minute periods when the furnace is operating in the melting and refining period. All visible emissions observations shall be conducted in accordance with Method 9. If visible emissions occur from more than one point, the opacity shall be recorded for any points where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the emission limit specified in § 60.272a(a).
**[40 CFR§60.273a(c)]**

(4) A furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of shop opacity are performed by a certified visible emission observer as follows: Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9. Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one

observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.
**[40 CFR§60.273a(d)]**

(5) A bag leak detection system must be installed and continuously operated on all single-stack fabric filters if the owner or operator elects not to install and operate a continuous opacity monitoring system as provided for under paragraph (c) of this section. In addition, the owner or operator shall meet the visible emissions observation requirements in paragraph (c) of this section. The bag leak detection system must meet the specifications and requirements of [*40 CFR§60.273a(e)(1) through (8)*].
**[40 CFR§60.273a(e)]**

(6) For each bag leak detection system installed according to paragraph (e) of this section, the owner or operator shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. Except as provided for under paragraph (g) of this section, the cause of the alarm must be alleviated within 3 hours of the time the alarm occurred by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to [*the requirements given under 40 CFR§60.273a(f)(1) through (6)*].
**[40 CFR§60.273a(f)]**

(7) In approving the site-specific monitoring plan required in paragraph (e)(4) of this section, the Administrator or delegated authority may allow owners or operators more than 3 hours to alleviate specific conditions that cause an alarm if the owner or operator identifies the condition that could lead to an alarm in the monitoring plan, adequately explains why it is not feasible to alleviate the condition within 3 hours of the time the alarm occurred, and demonstrates that the requested additional time will ensure alleviation of the condition as expeditiously as practicable.
**[40 CFR§60.273a(g)]**

b. **§ 60.274a Monitoring of operations.**

(1) The owner or operator subject to the provisions of this subpart shall maintain records of the following information:
**[40 CFR§60.274a(a)]**

(A) All data obtained under paragraph (b) of this section; and
**[40 CFR§60.274a(a)(1)]**

(B) All monthly operational status inspections performed under paragraph (c) of this section.
**[40 CFR§60.274a(a)(2)]**

(2) Except as provided under paragraph (e) of this section, the owner or operator subject to the provisions of this subpart shall check and record on a once-per-shift basis the furnace static pressure (if DEC system is in use, and a furnace static pressure gauge is installed according to paragraph (f) of this section) and either: check and record the control system fan motor amperes and damper position on a once-per-shift basis; install, calibrate, and maintain a monitoring device that continuously records the volumetric fl ow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric fl ow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow

rate monitoring device(s) shall have an accuracy of ±10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions. The Administrator may require the owner or operator to demonstrate the accuracy of the monitoring device(s)relative to Methods 1 and 2 of appendix A of this part. **[40 CFR§60.274a(b)]**

(3) When the owner or operator of an affected facility is required to demonstrate compliance with the standards under §60.272a(a)(3) and at any other time that the Administrator may require (under section 114 of the CAA, as amended) either: the control system fan motor amperes and all damper positions, the volumetric flow rate through each separately ducted hood, or the volumetric flow rate at the control device inlet and all damper positions shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to paragraph (b) of this section. The owner or operator may petition the Administrator for reestablishment of these parameters whenever the owner or operator can demonstrate to the Administrator's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate level for each applicable period. Operation at other than baseline values may be subject to the requirements of §60.276a(c). **[40 CFR§60.274a(c)]**

4.2.6. **Cooling Tower**

For the purposes of demonstrating initial and continuing compliance with the operational limits set forth in Table 4.1.8(a), the permittee shall, for all cooling towers, within 180 days of startup, take an initial grab sample of the cooling tower circulating water and analyze such to determine the total solids content of the cooling tower circulating water. Thereafter, the permittee shall test for solids content on an annual basis (with no more than 14 months between tests).

4.2.7. **RICE Oxidation Catalysts**

If applicable, the permittee shall meet the following requirements for use of Oxidation Catalysts on the Emergency Generator or Emergency Fire Water Pump:

a. The permittee shall regularly inspect, properly maintain and/or replace catalytic reduction devices to ensure functional and effective operation of each engine's physical and operational design. The permittee shall ensure proper operation, maintenance and performance of catalytic reduction devices by:

(1) Maintaining proper operation of the automatic air/fuel ratio controller or automatic feedback controller; and
(2) Following the catalyst manufacturer emissions related operating and maintenance recommendations, or develop, implement, or follow a site-specific maintenance plan.

b. To demonstrate compliance with section 4.2.8, the permittee shall maintain records of the maintenance performed on each RICE and/or generator and shall maintain a copy of the site specific maintenance plan or manufacturer maintenance plan.

4.2.8. **Baghouse/Fabric Filter Compliance Demonstrations**

Unless specifically requested by the Secretary under 4.3.1. or listed in Table 4.3.2., compliance with all baghouse and fabric filter mass emission limits that have BACT outlet grain loading limits shall be based on vendor information or vendor guarantees that show the maximum outlet grain loading emissions from the baghouse/fabric filter is in compliance with the specific limit.

4.2.9. [*Reserved*]

4.2.10. **Control Device Monitoring**

The permittee shall install, maintain, and operate instrumentation to continuously monitor and record the control device parameters as required under 4.1.9(b) of this permit including, at a minimum, the following:

**Table 4.2.10: Control Device Parameters Monitored/Recorded[1]**

| Control Device Description | Control Device ID | Parameter(s) |
|---|---|---|
| EAF Baghouse | BH1-BH | Pressure Drop |

(1) Does not include any monitoring as required by 40 CFR 60, Subpart AAa or 40 CFR 63, Subpart YYYYY.

4.2.11. **Visible Emissions Compliance Demonstrations**

Visible emissions Monitoring, Compliance Demonstration, Recording and Reporting shall be in accordance with the following requirements:

a. The opacity limitations and the associated compliance determinations are given in the following table for sources of particulate matter:

**Table 4.2.11(a): Visible Emissions Compliance Demonstrations**

| Emission Point(s) | Opacity Limit (%)[1] | Rule Citation | Compliance Demonstration |
|---|---|---|---|
| **Melt Shop** | | | |
| BH1-BH | 3% | 40 CFR§60.272a(a)(2) | Section 4.2.11(b) |
| CV1[2] | 6% | 40 CFR§60.272a(a)(3)<br>40 CFR§63.10686(b)(2) | |
| DUSTSLO1 | 10% | 40 CFR§60.272a(b) | |
| **45CSR7 Applicable Emission Points (Non-Material Handling)** | | | |
| CV1[3]<br>RMV1<br>CBV1<br>SPV1 | 20%[4] | 45CSR§7-3.1 and 3.2 | Section 4.2.11(c) |
| **45CSR7 Applicable Emission Points (Material Handling Stack/Vent)** | | | |
| FLXSLO11<br>FLXSLO12<br>CARBSLO1<br>DUSTSLO1 | 20%[4] | 45CSR§7-3.1 and 3.2 | Section 4.2.11(c) |
| **45CSR7 Applicable Emission Points (Material Handling Non-Stack/Vent)[5]** | | | |
| Storage Piles (outdoor)<br>TR11B1<br>TR51C<br>TR51E<br>TR81<br>MTLSCR<br>NOMTLSCR<br>CR1 | 20%[4] | 45CSR§7-3.1 and 3.2 | Section 4.2.11(c) |

| Emission Point(s) | Opacity Limit (%)[1] | Rule Citation | Compliance Demonstration |
|---|---|---|---|
| **Cooling Towers** | | | |
| CTNC11<br>CTNC12<br>CTC1 | 20%[4] | 45CSR§7-3.1 and 3.2 | Not Required[6] |
| **Natural Gas/Propane Combustion** | | | |
| Appendix A: Table A-3 (all) | None[7] | n/a | n/a |

(1) Where multiple opacity limits apply, the more restrictive is listed.
(2) Both Subpart AAa and Subpart YYYYY note that the 6% opacity limit is only applicable to any gases which are "*due solely to the operations of any affected EAF(s) or AOD vessel(s).*"
(3) The 20% opacity limit on CV1 is applicable to any gases which are not due solely to the operations of the EAF (see footnote (2) above).
(4) Shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
(5) While all sources listed on Appendix A: Table A-2 are subject to 45CSR§7-3.1 and 3.2, based on the nature and configuration of the plant, monitoring of the listed emission points were chosen as the practical method of showing compliance for all sources.
(6) Due to the nature of the particulate matter emissions from the Cooling Towers (entrained in droplets), a compliance demonstration for the Cooling Towers is not practical.
(7) Natural gas combustion does not meet the definition of a "source operation" pursuant to 45CSR§7-2.38.

b. **40 CFR 60, Subpart AAa/40 CFR 63, Subpart YYYYY**

For Emission Point BH1-BH and CV1 (see Table 4.2.11(a) footnote (2)), the permittee shall show compliance with the opacity requirements of 40 CFR 60, Subpart AAa, §60.272a(a) and 40 CFR 63, Subpart YYYYY, §63.10686, pursuant to the applicable requirements of Subpart AAa and Subpart YYYYY, respectively. Compliance with the opacity requirements of Subpart AAa shall show compliance with the opacity requirements of 45CSR7;

c. **Visible Emissions Compliance Demonstrations**

Visible emissions Monitoring, Compliance Demonstration, Recording and Reporting shall be in accordance with the following requirements:

(1) Compliance with the visible emission requirements for the emission points subject to 45CSR7 and listed in Table 4.2.11(a) above shall be in accordance with the following: Visible emission checks shall be conducted at least once per calendar month. These checks shall be performed for a sufficient time interval, but no less than a 6-minute interval, to determine if any visible emissions are present. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Visible emission checks shall be performed during periods of normal facility operation and appropriate weather conditions;

(2) The visible emission check shall determine the presence or absence of visible emissions. The observations shall be conducted according to Section 11 of EPA Method 22. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40CFR Part 60, Appendix A, Method 22 or from the lecture portion of the 40CFR Part 60, Appendix A, Method 9 which may include online web-based training as supplied by a Method 9 training company;

(3) If visible emissions are determined to be present at a source(s) during the testing required under 4.2.11(c)(3), the permittee shall, as soon as practicable, attempt to diagnose and correct any issue that is causing the presence of visible emissions;

(4) If the cause of the visible emissions are not correctable within a reasonable time (not to exceed three (3) hours), the permittee shall perform a Method 9 reading as soon as practicable to confirm that visible emissions are within the applicable limits of this permit;

(5) If, after a period of six (6) months, no visible emissions are observed under the monthly testing required under 4.2.11(c)(1), the permittee may proceed thereafter on a quarterly testing schedule. If any visible emissions are observed during a quarterly test, the permittee must revert back to a monthly test until the conditions of 4.2.11(c)(5) are met again; and

(6) If, at any time, plant personnel observe any sustained visible emissions (lasting longer than 6 minutes) from one of the emission points subject to the visible emissions testing under 4.2.11(c), the permittee shall conduct a Method 22 test on that emission point pursuant to the requirements of this section.

d. For the purpose of demonstrating compliance with the visible emissions and opacity requirements, the permittee shall maintain records of the visible emission opacity tests and checks. The permittee shall maintain records of all monitoring data required by 4.2.11 documenting the date and time of each visible emission check, the emission point or equipment/ source identification number, the name or means of identification of the observer, the results of the check(s), whether the visible emissions are normal for the process, and, if applicable, all corrective measures taken or planned. The permittee shall also record the general weather conditions (i.e. sunny, approximately 80°F, 6-10 mph NE wind) during the visual emission check(s). Should a visible emission observation be required to be performed per the requirements specified in Method 9, the data records of each observation shall be maintained per the requirements of Method 9. For an emission unit out of service during the evaluation, the record of observation may note "out of service" (O/S) or equivalent; and

e. Any deviation of the allowable visible emission requirement for any emission source discovered during observation using 40 CFR Part 60, Appendix A, Method 9 must be reported in writing to the Director of the DAQ as soon as practicable, but within ten (10) calendar days, of the occurrence and shall include, at a minimum, the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

4.2.12. **45CSR10A Monitoring Plan**

The owner or operator of a manufacturing process source(s) shall submit, to the Secretary for approval, a monitoring plan for each manufacturing process source(s) that describes the method the owner or operator will use to monitor compliance with the applicable emission standard set forth in section 4 of 45CSR10. The owner or operator of a manufacturing process source(s) may use CEMS, which shall be deemed to satisfy all of the requirements of an approved monitoring plan, or a monitoring plan as specified in subsection 6.4, in accordance with the provisions of this section. **[45CSR§10-6.2(a)]**

4.2.13. **Emission Point Map**

The permittee shall prepare and maintain an emission point map of the facility. This map shall consist of a diagram of the location and identification of all emission points at the facility that vent to ambient air. A legend shall be prepared with the map that identifies the emission point type and source(s) contributing to that emission point. This map shall be prepared within 180 days of startup and thereafter be updated as necessary to reflect current facility operations. The map(s) shall be retained on-site and be made available to the Director or his/her duly authorized representative upon request.

4.2.14. **Vendor Guarantees**

The permittee shall, at the time of initial startup, maintain on-site and have readily available to be made available to the Director or his/her representative upon request, a paper or electronic copy of the all current vendor guarantees used to directly determine the PTE of the facility in Permit Application R14-0040. This includes information relating to the performance of both emission units and control devices.

## 4.3. Performance Testing Requirements

4.3.1. **General Performance Testing**

At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

4.3.2. **Specific Emissions Point Performance Testing**

Within 60 days after achieving the maximum permitted production rate of the emission unit in question, but not later than 180 days after initial startup of the unit, the permittee shall conduct, or have conducted, in accordance with a protocol submitted pursuant to 3.3.1(c), performance tests on the emission units (as emitted from the listed emission points) to show compliance with the specified pollutants as given in the following table:

**Table 4.3.2.: Performance Testing Requirements**

| Emission Unit(s) | Emission Point(s) | Pollutants | Limit[(1)] |
|---|---|---|---|
| EAF1/LMS1 | BH1[(2)] | All Pollutants under Table 4.1.4(a) with the exception of Total HAPs, and $CO_2e$. | PPH<br>gr/dcsf (PM) |

(1) Where applicable, test results shall also be used to show compliance with lb/ton, lb/mmBtu, or other BACT performance limits.

(2) Initial and periodic performance testing on PM emitted from BH1 shall be in accordance with the procedures outlined under §60.18 and §60.275a.

4.3.3. **Performance Testing Schedule**

With respect to the performance testing required above under Section 4.3.2, the permittee shall, after the initial performance test, periodically conduct additional performance testing on the specified sources according to the following schedule:

**Table 4.3.3.: Performance Testing Schedule**

| Test | Test Results | Retesting Frequency |
|---|---|---|
| Initial Baseline | <50% of weight emission standard | Once/3 years |
| Initial Baseline | between 50% and 80 % of weight emission standard | Once/2 years |
| Initial Baseline | >80% of weight emission standard | Annual |
| Annual | after three successive tests indicate mass emission rates <50% of weight emission standard | Once/3 years |
| Annual | after two successive tests indicate mass emission rates <80 % of weight emission standard | Once/2 years |
| Annual | any tests indicates a mass emission rate >80% of weight emission standard | Annual |

| Test | Test Results | Retesting Frequency |
|---|---|---|
| Once/2 years | After two successive tests indicate mass emission rates <50% of weight emission standard | Once/3 years |
| Once/2 years | any tests indicates a mass emission rate <80 % of weight emission standard | Once/2 years |
| Once/2 years | any tests indicates a mass emission rate >80% of weight emission standard | Annual |
| Once/3 years | any tests indicates a mass emission rate <50% of weight emission standard | Once/3 years |
| Once/3 years | any test indicates mass emission rates between 50% and 80 % of weight emission standard | Once/2 years |
| Once/3 years | any test indicates a mass emission rate >80% of weight emission standard | Annual |

4.3.4. **CEMS Performance Testing**

Performance testing for pollutants monitored by CEMS (CO and $NO_x$, as emitted from the Emission Point BH1) are not subject to the performance testing schedule given under Table 4.3.3 and any performance testing shall, unless at such other reasonable time(s) as the Secretary may designate, be conducted on a schedule consistent with the required RATA testing.

4.3.5. **Performance Test Methods**

The permittee shall use the test methods specified in Table 4.3.5. unless granted approval in writing by the Director to use an alternative test method in a protocol submitted pursuant to 3.3.1(c).

**Table 4.3.5: Performance Test Methods**

| Pollutant | Test Method[(1)] |
|---|---|
| CO | Method 10 |
| $NO_x$ | Method 7E |
| $PM_{2.5}$ (filterable only) | Method 201A |
| $PM_{10}$/PM (filterable only) | Method 5 |
| $PM_{2.5}/PM_{10}$ (condensable) | Method 202 |
| $SO_2$ | Method 6C |
| VOCs | Method 18/25A |
| Lead | Method 12 |
| Fluoride[(2)] | Method 13 |

(1) All test methods refer to those given under 40 CFR 60, Appendix A
(2) Excluding Hydrogen Fluoride.

4.3.6. **Slag Testing**

Within 60 days after achieving the maximum permitted production rate of the emission unit in question, but not later than 180 days after initial startup of the unit, and at a minimum of once per

rolling twelve (12) month period thereafter, the permittee the permittee shall conduct, or have conducted, a test on a representative sample of EAF and LMF slag (that was produced on-site) to determine the concentration of lead and other metals defined as HAPs in the slag. This testing shall be performed in accordance with a protocol submitted pursuant to 3.3.1(c).

4.3.7. **EAF Metals Testing**
Within 60 days after achieving the maximum permitted production rate of the emission unit in question, but not later than 180 days after initial startup of the unit, the permittee shall conduct, or have conducted, in accordance with a protocol submitted pursuant to 3.3.1(c), a performance test to validate the emission factors (as listed in Table A-4d of the Permit Application R14-0040) used to determine the emissions of mercury, chromium, and manganese from Emission Point BH1.

4.3.8. **40 CFR 60, Subpart AAa**
The permittee shall meet all applicable Performance Testing requirements as given under 40 CFR 60, Subpart AAa, Section §60.275a.

4.3.9. **40 CFR 63, Subpart YYYYY**
The permittee shall meet all applicable Performance Testing requirements as given under 40 CFR 63, Subpart YYYYY, Section §63.10686(d).

4.3.10. **40 CFR 60, Subpart IIII**
The permittee shall meet all applicable Performance Testing requirements for the emergency engines as given under 40 CFR 60, Subpart IIII, Section §60.4212.

## 4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.**
The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

## 4.5. Additional Reporting Requirements

4.5.1. The permittee shall submit the following information to the DAQ according to the specified schedules:

a. **Biannual Monitoring Information Submission**
The permittee shall submit reports of all required monitoring (with the exception of visibility monitoring required under 4.2.11(c)) on or before September 15 for the reporting period January 1 to June 30 and March 15 for the reporting period July 1 to December 31. The following CEMS data shall be required: A summary report of the emissions during the applicable time period that includes, at a minimum, the highest and average emission rates of CO and $NO_x$ during the reporting period and the time and date of the highest recorded rates of each pollutant. All instances of deviation from permit requirements must be clearly identified in such reports; and

b. **Certification of Compliance**

The permittee shall submit to the Director on or before March 15, a certification of compliance with all requirements of this permit for the previous calendar year ending on December 31. If, during the previous annual period, the permittee had been out of compliance with any part of this permit, it shall be noted along with the following information: 1) the source/equipment/process that was non-compliant and the specific requirement of this permit that was not met, 2) the date the permitted discovered that the source/ equipment/process was out of compliance, 3) the date the Director was notified, 4) the corrective measures to get the source/equipment/process back into compliance, and 5) the date the source began to operate in compliance. The submission of any non-compliance report shall give no enforcement action immunity to episodes of non-compliance contained therein.

## CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title _____ _____
(please print or type) Name Title

Telephone No._____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

(ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

# Appendix A: Table A-1
# CMC Steel West Virginia: CMC Steel West Virginia
# R14-0040: 003-00286

**Table A-1 : Material Handling Stack/Vent Emission Limits**

| Emission Point ID | Description | Flow Rate[(1)] | Filter Outlet (gr/dscf)[(2)] | Hourly Emissions (lb/hr) | Annual Emissions (ton/yr) |
|---|---|---|---|---|---|
| | | dscf/min | $PM_{2.5}/PM_{10}/PM_{FILT}/PM_{TOT}$ | $PM_{2.5}/PM_{10}/PM_{FILT}/PM_{TOT}$ | $PM_{2.5}/PM_{10}/PM_{FILT}/PM_{TOT}$ |
| FLXSLO11 | Fluxing Agent Storage Silo No. 1 | 3,000 | 0.0050 | 0.129 | 0.064 |
| FLXSLO12 | Fluxing Agent Storage Silo No. 2 | 3,000 | 0.0050 | 0.129 | 0.064 |
| CARBSLO1 | Carbon Storage Silo No. 1 | 2,050 | 0.0050 | 0.088 | 0.044 |
| DUSTSLO1 | EAF Baghouse Dust Silo | 1,300 | 0.0050 | 0.056 | 0.244 |

(1) Air flow rates represent the modeled mechanical flow rate through the listed particulate matter control device during steady-state operation.

(2) gr/dscf = grains/dry standard cubic feet. For these emission points, baghouse/fabric filter is the BACT technology and the outlet loading is $PM_{2.5}/PM_{10}$/PM(filterable) BACT limit for the specified emission points.

## Appendix A: Table A-2
## CMC Steel West Virginia: CMC Steel West Virginia
## R14-0040: 003-00286

**Table A-2 : Material Handling Non-Stack/Vent Emission Limits**

| Emission Point ID | Description | Material[1] | Control Technology[1] | Hourly Emissions (lb/hr)[2] | | | Annual Emissions (ton/yr) | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | $PM_{2.5}$ | $PM_{10}$ | $PM_{FILT}/PM_{TOT}$ | $PM_{2.5}$ | $PM_{10}$ | $PM_{FILT}/PM_{TOT}$ |
| TR51A | ECS Storage Piles A, B, and C Drop Points | Scrap | PE[3] | 2.94E-03 | 1.94E-02 | 4.11E-02 | 5.99E-03 | 3.96E-02 | 8.36E-02 |
| TR51B | ECS Overage Storage Pile Drop Point | Scrap | None[3] | 2.34E-03 | 1.54E-02 | 3.27E-02 | 7.60E-03 | 5.02E-02 | 1.06E-01 |
| TR51C | Rail Storage Pile A, B, C, and D Drop Points | Scrap | None[3] | 7.80E-04 | 5.15E-03 | 1.09E-02 | 2.53E-03 | 1.67E-02 | 3.54E-02 |
| TR51E | Truck Storage Pile A, B, C, and D Drop Points | Scrap | None[3] | 7.80E-04 | 5.15E-03 | 1.09E-02 | 2.53E-03 | 1.67E-02 | 3.54E-02 |
| TR71 | Inside ECS Building Drop Point | Fluxing Agent | FE[3] | 2.98E-04 | 1.97E-03 | 4.16E-03 | 1.52E-04 | 1.01E-03 | 2.13E-03 |
| TR81 | Alloy Aggregate Storage Pile Drop Point | Alloy Aggregate | PE[3] | 2.13E-04 | 1.40E-03 | 2.97E-03 | 1.74E-05 | 1.15E-04 | 2.42E-04 |
| TR91A | Melthop Refractory Drop Points | Refractory/Other | FE[3] | 3.54E-04 | 2.34E-03 | 4.95E-03 | 1.98E-05 | 1.31E-04 | 2.77E-04 |
| TR91B | Outside Refractory Drop Points | Refractory/Other | None[3] | 1.77E-03 | 1.17E-02 | 2.47E-02 | 9.92E-05 | 6.55E-04 | 1.39E-03 |
| TR11A | Slag Storage Pile Drop Point | Slag | None[3][4] | 4.37E-05 | 2.89E-04 | 6.11E-04 | 3.99E-05 | 2.63E-04 | 5.57E-04 |
| TR11B1 | Slag Feed Hopper Drop Point | Slag | None[3][4] | 2.04E-04 | 1.34E-03 | 2.84E-03 | 1.86E-04 | 1.23E-03 | 2.59E-03 |
| TR11B2 | Slag Grizzly Drop Point | Slag | None[3][4] | 2.04E-04 | 1.34E-03 | 2.84E-03 | 1.86E-04 | 1.23E-03 | 2.59E-03 |
| TR11B3 | Slag Feed Conveyer Belt Drop Point | Slag | None[3][4] | 2.04E-04 | 1.34E-03 | 2.84E-03 | 1.86E-04 | 1.23E-03 | 2.59E-03 |
| TR11B4 | Slag Metallics Belt Conveyer Drop Point | Slag | None[3][4] | 1.53E-05 | 1.01E-04 | 2.13E-04 | 1.39E-05 | 9.20E-05 | 1.95E-04 |
| TR11B5 | Slag Triple Deck Metallics Screen Drop Point | Slag | None[3][4] | 1.53E-05 | 1.01E-04 | 2.13E-04 | 1.39E-05 | 9.20E-05 | 1.95E-04 |
| TR11B6 | Slag Triple Deck Non-Metallics Screen Drop Point | Slag | None[3][4] | 1.73E-04 | 1.14E-03 | 2.42E-03 | 1.58E-04 | 1.04E-03 | 2.20E-03 |
| MTLSCR | Slag Triple Deck Metallics Screen | Slag | None[4] | 7.50E-06 | 1.11E-04 | 3.30E-04 | 6.84E-06 | 1.01E-04 | 3.01E-04 |
| NOMTLSCR | Slag Triple Deck Non-Metallics Screen | Slag | None[4] | 8.50E-05 | 1.26E-03 | 3.74E-03 | 7.76E-05 | 1.15E-03 | 3.41E-03 |
| TR11B7 | Slag Stacking Belt Conveyer 1 Drop Point | Slag | None[3][4] | 3.05E-06 | 2.02E-05 | 4.26E-05 | 2.79E-06 | 1.84E-05 | 3.89E-05 |
| TR11B8 | Slag Stacking Belt Conveyer 2 Drop Point | Slag | None[3][4] | 3.05E-06 | 2.02E-05 | 4.26E-05 | 2.79E-06 | 1.84E-05 | 3.89E-05 |
| TR11B9 | Slag Stacking Belt Conveyer 3 Drop Point | Slag | None[3][4] | 8.75E-05 | 5.78E-04 | 1.22E-03 | 7.99E-05 | 5.27E-04 | 1.12E-03 |
| TR11B10 | Slag Stacking Belt Conveyer 4 Drop Point | Slag | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B11 | Slag Stacking Belt Conveyer 5 Drop Point | Slag | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B12 | Slag Stacking Belt Conveyer 6 Drop Point | Slag | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B13 | C-Scrap Storage Pile Drop Point | SPP Product | None[3][4] | 3.05E-06 | 2.02E-05 | 4.26E-05 | 2.79E-06 | 1.84E-05 | 3.89E-05 |
| TR11B14 | B-Scrap Storage Pile Drop Point | SPP Product | None[3][4] | 3.05E-06 | 2.02E-05 | 4.26E-05 | 2.79E-06 | 1.84E-05 | 3.89E-05 |
| TR11B15 | A-Scrap Storage Pile Drop Point | SPP Product | None[3][4] | 9.16E-06 | 6.05E-05 | 1.28E-04 | 8.36E-06 | 5.52E-05 | 1.17E-04 |
| TR11B16 | Slag Products Storage Pile 1 Drop Point | SPP Product | None[3][4] | 8.75E-05 | 5.78E-04 | 1.22E-03 | 7.99E-05 | 5.27E-04 | 1.12E-03 |
| TR11B17 | Slag Products Storage Pile 3 Drop Point | SPP Product | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B18 | Slag Overs Storage Pile Drop Point | SPP Product | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B19 | Slag Products Storage Pile 2 Drop Point | SPP Product | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B20 | A-Scrap Truck Loading Drop Points | SPP Product | None[3][4] | 9.16E-06 | 6.05E-05 | 1.28E-04 | 8.36E-06 | 5.52E-05 | 1.17E-04 |
| TR11B21 | B-Scrap Truck Loading Drop Points | SPP Product | None[3][4] | 3.05E-06 | 2.02E-05 | 4.26E-05 | 2.79E-06 | 1.84E-05 | 3.89E-05 |
| TR11B22 | C-Scrap Truck Loading Drop Points | SPP Product | None[3][4] | 3.05E-06 | 2.02E-05 | 4.26E-05 | 2.79E-06 | 1.84E-05 | 3.89E-05 |
| TR11B23 | Slag Products 1 Truck Loading Drop Point | SPP Product | None[3][4] | 8.75E-05 | 5.78E-04 | 1.22E-03 | 7.99E-05 | 5.27E-04 | 1.12E-03 |
| TR11B24 | Slag Products 2 Truck Loading Drop Point | SPP Product | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B25 | Slag Products 3 Truck Loading Drop Point | SPP Product | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR11B26 | Slag Products Overs Truck Loading Drop Point | SPP Product | None[3][4] | 2.85E-05 | 1.88E-04 | 3.98E-04 | 2.60E-05 | 1.72E-04 | 3.63E-04 |
| TR131 | Residual Scrap Storage Pile Drop Point | Residual Scrap | None[3] | 3.54E-04 | 2.34E-03 | 4.95E-03 | 1.98E-05 | 1.31E-04 | 2.77E-04 |
| TR141 | Mill Scale Pile Storage Pile Drop Point | Mill Scale | PE[3] | 3.19E-03 | 2.11E-02 | 4.45E-02 | 2.61E-04 | 1.72E-03 | 3.64E-03 |
| CR1 | Ball Drop Crushing | Large Scrap | None | 8.00E-04 | 4.32E-03 | 9.60E-03 | 4.10E-04 | 2.21E-03 | 4.92E-03 |

(1) PE - Partial Enclosure; FE - Full Enclosure; SPP = Slag Processing Plant

(2) Hourly emission limits are the BACT limits for the listed emission sources.

(3) Minimimize drop heights as practicable.

(4) Must maintain sufficient moisture content in material pursuant to same requirements as given for storage piles under 4.1.3(f)(2).

**Appendix A: Table A-3**
**CMC Steel West Virginia: CMC Steel West Virginia**
**R14-0040: 003-00286**

**Table A-3: Natural Gas/Propane Combustion Emission Limits[1]**

| Emission Point ID | Emission Unit ID | Description | Number of Idnetical Units | MDHI[2] | CO | | $NO_x$ | | $PM_{2.5}/PM_{10}/PM_{TOT}$[3] | | $PM_{FILT}$[4] | | $SO_2$ | | VOCs | | $CO_2e$ | | Total HAPs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | mmBtu/hr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr | lb/hr | ton/yr |
| CV1[5] | LPH1 | Ladle Preheaters | 3 | 18.00 | 1.48 | 6.49 | 2.56 | 11.20 | 0.14 | 0.60 | 0.039 | 0.172 | 0.197 | 0.862 | 0.16 | 0.69 | | 10,972 | | |
| CV1[5] | LD1 | Ladle Dryers | 2 | 16.00 | 1.32 | 5.77 | 2.27 | 9.96 | 0.12 | 0.54 | 0.035 | 0.153 | 0.175 | 0.766 | 0.14 | 0.61 | | 9,753 | | |
| CV1[5] | TPH1 | Tundish Preheaters | 2 | 12.00 | 0.99 | 4.33 | 1.70 | 7.47 | 0.09 | 0.40 | 0.026 | 0.115 | 0.131 | 0.574 | 0.10 | 0.46 | | 7,314 | | |
| CV1[5] | TD1 | Tundish Dryer | 1 | 6.00 | 0.49 | 2.16 | 0.85 | 3.73 | 0.05 | 0.20 | 0.013 | 0.057 | 0.066 | 0.287 | 0.05 | 0.23 | | 3,657 | | |
| CV1[5] | TMD1 | Tundish Mandril Dryer | 1 | 1.00 | 0.08 | 0.36 | 0.14 | 0.62 | 0.01 | 0.03 | 0.002 | 0.010 | 0.011 | 0.048 | 0.01 | 0.04 | | 610 | | |
| CV1[5] | SRDHTR1 | Shroud Heater | 1 | 0.50 | 0.04 | 0.18 | 0.07 | 0.31 | 0.00 | 0.02 | 0.001 | 0.005 | 0.005 | 0.024 | 0.00 | 0.02 | | 305 | 0.130 | 0.502 |
| CV1[5] | MSAUXHT | Meltshop Comfort Heaters | 20 | 8.00 | 0.66 | 1.44 | 1.14 | 2.49 | 0.06 | 0.13 | 0.017 | 0.038 | 0.087 | 0.191 | 0.07 | 0.15 | | 2,438 | | |
| RMV1[6] | BF1 | Bit Furnace | 1 | 0.23 | 0.02 | 0.08 | 0.03 | 0.14 | 0.00 | 0.01 | 0.000 | 0.002 | 0.002 | 0.011 | 0.00 | 0.01 | | 137 | | |
| RMV1[6] | RMAUXHT | Rolling Mill Comfort Heaters | 20 | 8.00 | 0.66 | 1.44 | 1.14 | 2.49 | 0.06 | 0.13 | 0.017 | 0.038 | 0.087 | 0.191 | 0.07 | 0.15 | | 2,438 | | |
| TORCH1 | TORCH1 | Cutting Torches | n/a | 0.32 | 0.03 | 0.05 | 0.05 | 0.09 | 0.00 | 0.00 | 0.001 | 0.001 | 0.004 | 0.007 | 0.00 | 0.01 | | 89 | | |

(1) Emission Limits represent the aggregate limits of the listed units. Individual unit emission limits are aggregate emission limits divided by the number of units.
(2) Aggregate MDHI of all units as described.
(3) Includes condensable particulate matter.
(4) Filterable particulate matter only.
(5) These sources vent inside the Meltshop building and CMC has conservatively estimated that all emissions are emitted from CV1.
(6) These sources vent inside the Rolling Mill building and vent through RMV1.