

**Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601
(502) 564-3999**

Draft

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: North American Stainless
Mailing Address: 6870 Highway 42 East,
Ghent, Kentucky 41045

Source Name: North American Stainless
Mailing Address: 6870 Highway 42 East
Ghent, Kentucky 41045

Source Location: Same as above

Permit: V-23-003 R1
Agency Interest: 711
Activity: APE20240004; APE20250001
Review Type: Title V, Operating
Source ID: 21-041-00034

Regional Office: Florence Regional Office
8020 Veterans Memorial Drive, Suite 110
Florence, KY 41042
(859) 525-4923

County: Carroll

Application
Complete Date: September 3, 2020
Issuance Date: October 6, 2023
Revision Date:
Expiration Date: October 6, 2028

**For Michael J. Kennedy, P.E.
Director
Division for Air Quality**

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Permit	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action
V-23-003	Renewal	APE20200003; APE20220002; APE20220003; APE20220006; APE20230001	9/3/2020	10/6/2023	Permit renewal; addition of brick crushing operation & slag processing; change from minor source of HAP to major source of HAP; modification of EP 007, addition of EP 157, and insignificant activities: EP 158, EP 159, and EP 160
V-23-003 R1	Significant Revision 1	APE20240004; APE20250001	1/24/2025		Modification of AOD and Ladle standby preheaters; updated CAM plan for EAFs and AODs

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

Abbreviations

The following definitions apply to abbreviations used in this permit:

AOD	—	Argon Oxidization Decarburization Vessel
CAM	—	Compliance Assurance Monitoring
CEMS	—	Continuous Emission Monitoring System
CO	—	Carbon Monoxide
Division	—	Kentucky Division for Air Quality
hr	—	hour
HF	—	Hydrogen Fluoride
lb	—	Pounds
MMBtu	—	Million British Thermal Units
MMscf	—	Million Standard Cubic Feet (of gas)
NO _x	—	Nitrogen Oxides
NO ₂	—	Nitrogen Dioxide
PM	—	Particulate Matter
PM ₁₀	—	Particulate Matter equal to or smaller than 10 micrometers
ppm	—	Parts per million
PSD	—	Prevention of Significant Deterioration
SO ₂	—	Sulfur Dioxide
VOC	—	Volatile Organic Compounds
KYEIS	—	Kentucky Emissions Inventory System
Reference Method 9	—	U.S. EPA Reference Method 9, 40 CFR 60, Appendix A
NAS	—	North American Stainless

NAS, Source ID # 21-041-00034 (A.I. # 711), and the co-located processing plants, Metal Services LLC, Source ID # 21-041-00047 (A.I. # 117650), and Calvert Steel, Source ID # 21-041-09290 (A.I. # 112822), are considered by the Cabinet to be one stationary source as defined in 401 KAR 52:001, Definitions of 401 KAR Chapter 52. Each source is subject to 401 KAR 52:020 and will be issued individual Title V operating permits. Pursuant to the respective Title V permits, each permittee is responsible and liable for their own violations unless there is a joint cause for the violations.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Group 1 – Annealing Furnaces

Emission Point #	Description	Maximum Capacity (MMBtu/hr)	Fuel	Control Equipment	Construction Commenced
006 (S-06)	Flat Products Annealing Furnace #1	70	Natural Gas	Low NO _x Burner	3/31/1992
001 (S-01)	Flat Products Annealing Furnace #2	85	Natural Gas	Low NO _x Burner	3/31/1992
061 (S-61)	Flat Products Annealing Furnace #3	67.5	Natural Gas	Low NO _x Burner	3/7/2001
102 (S-102)	Flat Products Annealing Furnace #4	130	Natural Gas	Low NO _x Burner	5/1/2007
026 (S-26)	Plate Products Annealing Furnace	16.5	Natural Gas	Ultra-Low NO _x Burner	9/10/1999
070 (S-70)	Long Products Annealing Furnace #1	40	Natural Gas	Low NO _x Burner	3/15/2002
071 (S-71)	Long Products Annealing Furnace #2	18	Natural Gas	Low NO _x Burner	4/1/2008
121 (S-121)	Long Products Annealing Furnace #3	18	Natural Gas	Low NO _x Burner	11/1/2012

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]
- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (a) and (b) when combusting natural gas.

- c. The permittee shall not allow emissions of CO, PM, PM₁₀, NO_x, and VOC to exceed the limits in the following table: [401 KAR 51:017]

Emission Point #	CO Limit*	PM Limit*	PM ₁₀ Limit* (filterable)	NO _x Limit*	VOC Limit*
001, 006, 061, & 102 (combined)	29.61 lb/hr; 129.71 ton/yr	---	2.68 lb/hr; 11.74 ton/yr	21.15 lb/hr; 92.64 ton/yr	1.95 lb/hr; 8.5 ton/yr
026	1.39 lb/hr; 6.1 ton/yr	0.13 lb/hr; 0.55 ton/yr	---	1.39 lb/hr; 6.1 ton/yr	0.09 lb/hr; 0.40 ton/yr
070	3.29 lb/hr; 17.18 ton/yr	0.30 lb/hr; 1.31 ton/yr	---	3.0 lb/hr; 13.14 ton/yr	0.22 lb/hr; 0.94 ton/yr
071 & 121 (combined)	1.48 lb/hr; 6.5 ton/yr	0.14 lb/hr; 0.59 ton/yr	---	1.35 lb/hr; 5.91 ton/yr	0.10 lb/hr; 0.43 ton/yr

*Note: lb/hr limits are 30-day rolling averages and ton/yr limits are 12-month rolling totals.

Compliance Demonstration Method:

Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c).

- d. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

The Cabinet determines that the source is in compliance with 401 KAR 63:020 when burning natural gas.

3. Testing Requirements:

- a. The permittee shall conduct performance tests to demonstrate compliance with **2. Emission Limitations** (c). The testing shall be conducted no later than September 2024 for EP 001. For EP 102, the testing shall be conducted 180 days after issuance of the final permit V-23-003. The permittee shall use the following methods:
- U.S. EPA Method 7E for determination of NO_x emissions from Stationary Sources in 40 CFR 60, Appendix A;
 - U.S. EPA Method 10 for determination of CO emissions from Stationary Sources in 40 CFR 60, Appendix A;
 - U.S. EPA Method 5 for determination of PM emissions from Stationary Sources in 40 CFR 60, Appendix A;
 - U.S. EPA Method 25A for determination of VOC emissions from Stationary Sources in 40 CFR 60, Appendix A;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- v. An alternate method as approved by the Division;
 - vi. EP 001 is the representative unit for EP 006 and EP 061 for the purpose of this testing requirement.
 - b. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.
- 4. Specific Monitoring Requirements:**
- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total natural gas usage in MMscf;
 - ii. The monthly and 12-month rolling total hours of operation.
 - b. The permittee shall calculate monthly and 12-month rolling emissions of CO, PM, PM₁₀, NO_x, and VOC for each emission point to ensure compliance with the emission limits in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
 - c. Refer to **SECTION F** for general monitoring requirements.
- 5. Specific Recordkeeping Requirements:**
- a. The permittee shall maintain records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling natural gas usage in MMscf;
 - ii. The monthly and 12-month rolling total hours of operation.
 - b. The permittee shall maintain records of monthly and 12-month rolling emissions of CO, PM, PM₁₀, NO_x, and VOC for each emission point to ensure compliance with the emission limits listed in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
 - c. Refer to **SECTION F** for general recordkeeping requirements.
- 6. Specific Reporting Requirements:**
- Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 2 – Acid Pickling

Emission Point #	Description	Maximum Capacity (tons of steel/hr)	Control Equipment	Construction Commenced
003 (S-03)	Flat Products Mixed Acid Pickling #1 (AP1)	75	One Shared Selective Catalytic Reduction (SCR) DeNOx System	2/1/1991; Modified: 12/2005
007 (S-07)	Flat Products Mixed Acid Pickling #2 (AP2)	100		2/1/1992; Modified: 12/2005 & 2023
028 (S-28)	Plate Pickling Section	30	Wet Scrubber	9/10/1999
062 (S-62)	Acid Pickling #3 (AP3)	70	SCR	3/7/2001
074 (S-74)	Long Products Pickling Line #1	25	Wet Scrubber	3/15/2002
078 (S-78)	Angle Pickling Line #1	10	Wet Scrubber	3/15/2002
101 (S-101)	Flat Products Pickling #4 (AP4)	225	SCR	5/1/2007

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*, for NO_x

401 KAR 53:010, *Ambient air quality standards*

401 KAR 59:010, *New process operations*

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for NO_x

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (c) and **5. Specific Recordkeeping Requirements** (c).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) based on the information provided in the application and any supplemental information submitted by the source.

- c. The permittee shall not allow emissions of NO_x to exceed the limits in the following table: [401 KAR 51:017]

Emission Point #	NO _x Limit (ppmv)	NO _x Limit (lb/hr)*	NO _x Limit (ton/yr)*
003 & 007 (combined)	50 (combined)	4.60 (combined)	20.14 (combined)
028	100	1.44	6.32
062	100	2.55	11.17
074	100	9.61	42.10
078	75	1.08	4.74
101	50	4.81	21.05

* Note: lb/hr limits are 30-day rolling averages and ton/yr limits are 12-month rolling totals.

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- Refer to **3. Testing Requirements** (b);
- Refer to **4. Specific Monitoring Requirements** (a) and (d) and **5. Specific Recordkeeping Requirements** (a) and (e);
- Refer to **Appendix A – CAM Plan**; and
- Refer to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

- The permittee shall conduct a performance test for HF on the scrubber associated with each pickling tank to determine an emission factor for HF, in units of pounds per ton of steel processed. The testing shall be conducted no later than August 2026 for EPs 028 and 101. [401 KAR 50:045]
 - The permittee shall use U.S. EPA Reference Method 26A, or an alternate method as approved by the Division;
 - The permittee shall record the concentration of HF in the tank at the time of the test;
 - Each performance test shall consist of three separate 1-hour test runs;
 - EP 028 is the representative unit for EP 074 and EP 078 for the purposes of this testing requirement.
 - EP 101 is the representative unit for EP 003, EP 007, and EP 062 for the purposes of this testing requirement.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall conduct a performance test for NO_x on the SCR exhaust and scrubber exhaust associated with each pickling tank using U.S. EPA Reference Method 7E, or an alternate method as approved by the Division, to measure NO_x emissions, in units of ppm and lb/hr. Using the test data, an emission factor shall be established in units of lb NO_x per ton of steel pickled. The testing for EPs 028 and 101 shall be conducted no later than 180 days after issuance of the final permit V-23-003. [401 KAR 51:017]
 - i. *For EP 028:* Site-specific operating parameter value ranges for pressure drop and pH of scrubbing liquor are established in the Appendix A – CAM Plan. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to demonstrate the parameter falls within the CAM plan performance indicator range, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency.
 - ii. *For EP 101:* Site-specific operating parameter ranges for ammonia flow rate and parameter value for minimum combustion chamber temperature are established in the Appendix A – CAM Plan to both meet applicable emission limitations and minimize ammonia slip during normal operation. During the emission test, each operating parameter must be monitored continuously and recorded with sufficient frequency to demonstrate the parameter falls within the CAM plan performance indicator range or value, but no less frequently than once every 15 minutes. The permittee shall determine the operating parameter monitoring values as the averages of the values recorded during any of the runs for which results are used to establish the emission concentration or collection efficiency.
- c. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall inspect spray headers and nozzles on each scrubber once per six calendar months. [401 KAR 52:020, Section 10]
- c. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once per calendar month while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. The permittee shall calculate monthly and 12-month rolling emissions of NO_x for each emission point to ensure compliance with the emission limits in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- e. The permittee shall monitor monthly and 12-month rolling total emissions of HF in tons, calculated using the emission factors determined in **3. Testing Requirements** (a). [401 KAR 52:020, Section 10]
- f. The permittee shall monitor the following SCR operating parameters at least once per shift during periods of production for each SCR listed above: [401 KAR 52:020, Section 10]
 - i. Flow rate of ammonia;
 - ii. Temperature of the reaction chamber.
- g. The permittee shall monitor the following wet scrubber operating parameters at least once per shift during periods of production for each wet scrubber listed above: [401 KAR 52:020, Section 10]
 - i. pH of the scrubbing liquor;
 - ii. Pressure drop across the scrubber.
- h. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- i. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation;
 - iii. MSDS for all chemicals or materials used.
- b. The permittee shall maintain records of inspections of spray headers and nozzles on each scrubber once every six months [401 KAR 52:020, Section 10]
- c. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (c), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of monthly and 12-month rolling emissions of HF for each emission point. [401 KAR 52:020, Section 10]
- e. The permittee shall maintain records of monthly and 12-month rolling emissions of NO_x for each emission point to ensure compliance with the emission limits in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. The permittee shall maintain records of the following SCR operating parameters at least once per shift during periods of production for each SCR listed above: [401 KAR 52:020, Section 10]
 - i. Flow rate of ammonia;
 - ii. Temperature of the reaction chamber.
- g. The permittee shall maintain records of the following wet scrubber operating parameters at least once per shift during periods of production for each wet scrubber listed above: [401 KAR 52:020, Section 10]
 - i. pH of the scrubbing liquor;
 - ii. Pressure drop across the scrubber.
- h. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- i. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- j. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain the control device(s) associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- b. The permittee shall install a NO_x analyzer on each control device listed above. The NO_x analyzer shall be calibrated, operated, and maintained at all times according to manufacturer's recommendations. [401 KAR 52:020, Section 10]
- c. The permittee shall install and maintain a device for the measurement of pressure drop across each control device for EPs 028, 074, and 078 per manufacturer's specifications. The permittee shall verify calibration of the pressure gauge once per calendar year, and replace as necessary. [401 KAR 52:020, Section 10]
- d. The permittee shall install, calibrate at least once per calendar year, and maintain a device for the measurement of pH of the scrubbing liquor in each scrubber for EPs 028, 074, and 078. [401 KAR 52:020, Section 10]
- e. The permittee shall maintain calibration records for all monitoring devices. [401 KAR 52:020, Section 10]
- f. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 3 – Coil Polishing

Emission Point #	Description	Maximum Capacity (tons of steel/hr)	Control Equipment	Construction Commenced
004 (S-04)	Coil Polishing #1	65	Mist Collector	11/30/1991
099 (S-99)	Coil Polishing #2	65	Mist Collector	2/1/2006

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for PM

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions** and when complying with the PM emission limits in **2. Emission Limitations** (c).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall not allow emissions of PM to exceed the limits in the following table:
[To preclude 401 KAR 51:017]

Emission Point #	PM Limit (lb/hr) *	PM Limit (ton/yr) *
004	---	30
099	1.5	6.6

*Note: lb/hr limits are 30-day rolling averages and ton/yr limits are 12-month rolling totals.

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- A. Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c).
- B. Refer to **Appendix A – CAM Plan**; and
- C. Refer to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

- a. The permittee shall conduct performance testing for PM to demonstrate compliance with **2. Emission Limitations** (c) and determine an emission factor in pounds per ton of steel processed. The testing for EP 004 shall be conducted no later than March 2026. [To preclude 401 KAR 51:017]
 - i. The permittee shall use U.S. EPA Reference Method 5 for PM, or an alternate method as approved by the Division;
 - ii. EP 004 is the representative unit for EP 099 for the purposes of this testing requirement.
- b. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week and a Reference Method 9 reading simultaneous with a qualitative visual observation once per calendar quarter while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall calculate monthly and 12-month rolling emissions of PM for each emission point to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The control equipment shall be inspected to ensure the proper operation. Inspection of the mist collector shall consist of: [401 KAR 52:020, Section 10]
 - i. Weekly check of the visible emissions;
 - ii. Monthly visual inspection of the impingement plates to determine that they are in proper working condition; and
 - iii. Operate control equipment such that pressure drop is within specified range; pressure drop readings shall be recorded monthly.
- e. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- f. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation;
 - iii. Inspection of control equipment required by **4. Specific Monitoring Requirements** (d).
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of monthly and 12-month rolling emissions of PM for each emission point to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- e. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
 - iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain mist eliminators on each emission point listed above. [401 KAR 51:017]
- b. The permittee shall install, operate, and maintain the control device(s) associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- c. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 4 – Z-Mills

Emission Point #	Description	Maximum Capacity	Control Equipment	Construction Commenced
005 (S-05)	Z-Mill #1 Cold Rolling Mill	60 tons of steel/hr	Mist Collector	10/31/1991
011 (S-11)	Z-Mill #2 Cold Rolling Mill	80 tons of steel/hr	Mist Collector	1/23/1995
060 (S-60)	Z-Mill #3 Cold Rolling Mill	50 tons of steel/hr	Oil Mist Eliminator	3/7/2001
092 (S-92)	Z-Mill #4 Cold Rolling Mill	40 tons of steel/hr	Oil Mist Eliminator	1/1/2004
095 (S-95)	Z-Mill #5 Cold Rolling Mill	80 tons of steel/hr	Oil Mist Eliminator	10/7/2007

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for PM

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Operating Conditions and when complying with the PM emission limits in **2. Emission Limitations** (c).

- c. The permittee shall not allow emissions of PM and VOC to exceed the limits in the following table: [401 KAR 51:017]

Emission Point #	PM Limit*	VOC Limit*
005	25 ton/yr	100 ton/yr
011	25 ton/yr	100 ton/yr
060	1.5 lb/hr; 6.6 ton/yr	100 ton/yr
092	1.5 lb/hr; 6.6 ton/yr	100 ton/yr
095	1.5 lb/hr; 6.6 ton/yr	100 ton/yr

* Note: lb/hr limits are 30-day rolling averages and ton/yr limits are 12-month rolling totals.

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- A. Refer to **3. Testing Requirements**;
- B. Refer to **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c);
- C. Refer to **Appendix A – CAM Plan**; and
- D. Refer to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

- a. The permittee shall conduct performance testing for PM and VOC to demonstrate compliance with **2. Emission Limitations** (c) and determine an emission factor in pounds per ton of steel processed. The testing for EP 011 shall be conducted no later than April 2026. The testing for EP 095 shall be conducted within 5 years of the most recent Division approved stack test. [401 KAR 51:017]
 - i. The permittee shall use U.S. EPA Reference Method 5 for PM, or an alternate method as approved by the Division;
 - ii. The permittee shall use U.S. EPA Reference Method 25A for VOC, or an alternate method as approved by the Division;
 - iii. EP 011 is the representative unit for EP 005 for the purposes of this testing requirement; and
 - iv. EP 095 is the representative unit for EP 060 and EP 092 for the purposes of this testing requirement.
- b. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week and a Reference Method 9 reading simultaneous with a qualitative visual observation once per calendar quarter while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of PM and VOC for each emission point to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. For EP 005 and EP 011, control equipment shall be inspected to ensure their proper operation. Inspection of the control equipment shall consist of: [401 KAR 52:020, Section 10]
- i. A weekly check of the visible emissions;
 - ii. A once per calendar month visual inspection of the filters to determine whether they are in proper working condition; and
 - iii. Operate control equipment such that pressure drop is within specified range; pressure drop readings will be recorded once per calendar month.
- e. For EP 060, EP 092, and EP 095, the control equipment shall be inspected to ensure their proper operation. Inspection of the control equipment shall consist of: [401 KAR 52:020, Section 10]
- i. A once per calendar month visual inspection of the inlet and outlet ducting of the controls, as well as their general condition, to determine whether they are in proper working condition; and
 - ii. Operate control equipment such that pressure drop is within specified range; pressure drop readings will be recorded once per calendar month.
- f. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- g. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation;
 - iii. The MSDS for all chemicals or materials used;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. Inspection of control equipment required by **4. Specific Monitoring Requirements** (d) and (e).
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall keep records of monthly and 12-month rolling emissions of PM and VOC for each emission point to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of the visual inspections and pressure drop readings of the control equipment at the source indicating the date of each inspection and whether the control equipment is in proper working condition. [401 KAR 52:020, Section 10]
- e. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- f. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- g. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
 - iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
 - c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
 - d. Refer to **SECTION F** for general reporting requirements.
- 7. Specific Control Equipment Operating Conditions:**
- a. The permittee shall install, operate, and maintain the control device(s) associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
 - b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP 008 (S1) Lime Unloading**

Description: Pneumatic unloading of lime storage bin.

Construction Commenced: 3/1/1992

Maximum Capacity: 1 ton of lime/hr

Control Equipment: Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for PM

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
- i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
- ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
- iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$
- Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions**.

- c. The permittee shall not allow emissions of PM from EP 008 to exceed 7 tons/yr on a 12-month rolling total basis. [To preclude 401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limit listed above as follows:

- A. Refer to **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c);
- B. Refer to **Appendix A – CAM Plan**; and
- C. Refer to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for EP 008: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitation in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The filter used as the control equipment shall be inspected to ensure its proper operation. Inspection of the filter shall consist of: [401 KAR 52:020, Section 10]
 - i. A weekly check of the visible emissions; and
 - ii. A monthly visual inspection of the filter to determine whether they are in proper working condition.
- e. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- f. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation;
 - iii. Inspections of control equipment required by **4. Specific Monitoring Requirements** (d).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall keep records of monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitation in **2. Emission Limitations (c)**. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- e. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- f. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.
- 7. Specific Control Equipment Operating Conditions:**
 - a. The permittee shall install, operate, and maintain the control device associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
 - b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 5 – Boilers

Emission Point #	Description	Maximum Capacity (MMbtu/hr)	Fuel	Control Equipment	Construction Commenced
009 (S-09)	Boiler #1	36	Natural Gas	None	2/1/1992
010 (S-10)	Boiler #2	36	Natural Gas	None	2/1/1992
110 (S-110)	Standby Boiler #3	36	Natural Gas	None	7/1/2000
103 (S-103)	Boiler #4	36	Natural Gas	None	4/1/2008
150	LP Boiler	6	Natural Gas	None	4/15/2016
151	LP Boiler	6	Natural Gas	None	4/15/2016

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*, applies to EPs 009, 010, 110, and 103.

401 KAR 59:015, *New indirect heat exchangers*

401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c to 60.48c (Subpart Dc), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, applies to EPs 009, 010, 110, and 103.

401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R. 63.7480 to 63.7575, Tables 1 to 13 (Subpart DDDDD), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*. Under this regulation, EPs 009, 010, 110, 103, 150 & 151 are existing units.

1. Operating Limitations:

- a. The permittee must meet the requirements in 40 CFR 63.7500(a)(1) through (3), except as provided in 40 CFR 63.7500(b) through (e). The permittee must meet these requirements at all times the affected unit is operating, except as provided in 40 CFR 63.7500(f). [40 CFR 63.7500(a)]
 - i. The permittee must meet each work practice standard in Table 3 to 40 CFR 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater. [40 CFR 63.7500(a)(1)]
 - ii. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. For EPs 150 & 151, the permittee must complete a tune-up every 2 years as specified in 40 CFR 63.7540. [40 CFR 63.7500(e); 40 CFR 63, Subpart DDDDD, Table 3(2)]
- c. For EPs 009, 010, 110, & 103, the permittee must conduct a tune-up of the boiler or process heater annually as specified in 40 CFR 63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under 40 CFR 63, Subpart DDDDD. [40 CFR 63, Subpart DDDDD, Table 3(3)]
- d. The permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in 40 CFR 63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in 40 CFR 63.7575. [40 CFR 63, Subpart DDDDD, Table 3(4)]
 - i. A visual inspection of the boiler or process heater system. [40 CFR 63, Subpart DDDDD, Table 3(4)(a)]
 - ii. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints. [40 CFR 63, Subpart DDDDD, Table 3(4)(b)]
 - iii. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator. [40 CFR 63, Subpart DDDDD, Table 3(4)(c)]
 - iv. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage. [40 CFR 63, Subpart DDDDD, Table 3(4)(d)]
 - v. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified. [40 CFR 63, Subpart DDDDD, Table 3(4)(e)]
 - vi. A list of cost-effective energy conservation measures that are within the facility's control. [40 CFR 63, Subpart DDDDD, Table 3(4)(f)]
 - vii. A list of the energy savings potential of the energy conservation measures identified. [40 CFR 63, Subpart DDDDD, Table 3(4)(g)]
 - viii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR 63, Subpart DDDDD, Table 3(4)(h)]
- e. The permittee must be in compliance with the emission limits, work practice standards, and operating limits in 40 CFR 63, Subpart DDDDD. These emission and operating limits apply to the permittee at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f). [40 CFR 63.7505(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) no later than the compliance date specified in 40 CFR 63.7495, except as specified in 40 CFR 63.7510(j). The permittee must complete the one-time energy assessment specified in Table 3 to 40 CFR 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495. [40 CFR 63.7510(e)]
- g. If the emission point has not operated between the effective date of the rule and the compliance date that is specified for the source in 40 CFR 63.7495, the permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) no later than 30 days after the re-start of the affected source and, if applicable, complete the one-time energy assessment specified in Table 3 to 40 CFR 63, Subpart DDDDD, no later than the compliance date specified in 40 CFR 63.7495. [40 CFR 63.7510(j)]
- h. The permittee must conduct an annual, biennial, or 5-year performance tune-up according to 40 CFR 63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in 40 CFR 63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after the initial startup of the new or reconstructed affected source. [40 CFR 63.7515(d)]
- i. The permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) and the schedule described in 40 CFR 63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up. [40 CFR 63.7515(g)]

Compliance Demonstration Method:

- A. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 to 40 CFR 63, Subpart DDDDD that apply according to the methods specified in Table 8 to 40 CFR 63, Subpart DDDDD and 40 CFR 63.7540(a)(1) through (19). [40 CFR 63.7540(a)]
- B. If the permittee's boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual tune-up of each boiler or process heater to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (vi). The permittee must conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]
 - 1. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]
 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). [40 CFR 63.7540(a)(10)(iii)]
 4. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject; [40 CFR 63.7540(a)(10)(iv)]
 5. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]
 6. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C), [40 CFR 63.7540(a)(10)(vi)]
 - I. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [40 CFR 63.7540(a)(10)(vi)(A)]
 - II. A description of any corrective actions taken as a part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]
 - III. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [40 CFR 63.7540(a)(10)(vi)(C)]
 - C. For EPs 150 & 151, the permittee must conduct a biennial tune-up of the process heater as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. [40 CFR 63.7540(a)(11)]
 - D. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. [40 CFR 63.7540(a)(12)]
 - E. If the unit is not operating on the required date for tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

F. Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements**, **6. Specific Reporting Requirements**.

2. Emission Limitations:

- a. The permittee shall not cause emissions of particulate matter or sulfur dioxide in excess of the following emission limitations: [401 KAR 59:015, Sections 4(1)(c) & 5(1)(c)(1)]

Emission Point #	Installation Date	Pollutant	Emission Limitation (lb/MMBtu)
009	1992	PM	0.35
		SO ₂	1.33
010	1992	PM	0.35
		SO ₂	1.33
110	2000	PM	0.32
		SO ₂	1.13
103	2008	PM	0.30
		SO ₂	1.00
150	2016	PM	0.29
		SO ₂	0.97
151	2016	PM	0.29
		SO ₂	0.97

- b. The permittee shall not cause emissions of particulate matter in excess of twenty (20) percent opacity from each indirect heat exchanger. [401 KAR 59:015, Section 4 (2)]

Compliance Demonstration Method:

These units are assumed to be in compliance with the particulate matter, opacity and sulfur dioxide emission limitations in 401 KAR 59:015 while burning natural gas.

- c. The permittee shall not allow emissions of PM, NO_x, SO₂, and VOC to exceed the limits in the following table: [401 KAR 51:017]

Emission Point #	CO Limit*	PM Limit*	SO ₂ Limit*	NO _x Limit*	VOC Limit*
009, 010, 110	---	1.0 ton/yr**	1.0 ton/yr**	---	---
103	1.30 lb/hr; 5.68 ton/yr	0.27 lb/hr; 1.18 ton/yr	---	1.26 lb/hr; 5.52 ton/yr	0.19 lb/hr; 0.85 ton/yr

* lb/hr limits are 3-hour averages and ton/yr limits are 12-month rolling totals.

**Combined limit for EPs 009, 010 & 110.

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (a), (b) and (c), and **5. Specific Recordkeeping Requirements** (a), (b), and (c).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total natural gas usage;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. For EP 103, the permittee shall calculate monthly and 12-month rolling emissions of CO, PM, NO_x, and VOC to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- c. For EP 009, 010, and 110, the permittee shall calculate monthly and 12-month rolling emissions of PM and SO₂ to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total of natural gas usage.
 - ii. The monthly and 12-month rolling total hours of operation.
- b. For EP 103, the permittee shall keep records of monthly and 12-month rolling emissions of CO, PM, NO_x, and VOC to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- c. For EP 009, 010, and 110, the permittee shall keep records of monthly and 12-month rolling emissions of PM and SO₂ to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. For EPs 009, 010, 110, and 103: Except as provided under 40 CFR 60.48c(g)(2) and (g)(3), the permittee of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day. [40 CFR 60.48c(g)(1)]
 - i. As an alternative to meeting the requirements of 40 CFR 60.48c(g)(1), the permittee may elect to record and maintain records of the amount of each fuel combusted during each calendar month. [40 CFR 60.48c(g)(2)]
- e. The permittee must keep records according to 40 CFR 63.7555(a)(1) and (2). [40 CFR 63.7555(a)]
 - i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
- ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)]
- f. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]
- g. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]
- h. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]
- i. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. The permittee must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to 40 CFR 63, Subpart DDDDD, and that the assessment is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended. [40 CFR 63.7530(e)]
- b. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e). [40 CFR 63.7530(f)]
- c. The permittee must report each instance in which the permittee did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 15 to 40 CFR 63, Subpart DDDDD that apply. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63, Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]
- d. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]
- e. As specified in 40 CFR 63.9(b)(2), the permittee must submit an Initial Notification no later than 120 days after the source becomes subject to 40 CFR 63, Subpart DDDDD. [40 CFR 63.7545(b) & (c)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. The permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in 40 CFR 63.7545(e)(1) through (8), as applicable. If the permittee not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a), the Notification of Compliance Status must only contain the information specified in 40 CFR 63.7545(e)(1) and (8) and must be submitted within 60 days of the compliance date specified at 40 CFR 63.7495(b). [40 CFR 63.7545(e)]
- i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. [40 CFR 63.7545(e)(1)]
- ii. A signed certification that the permittee has met all applicable emission limits and work practice standards. [40 CFR 63.7545(e)(6)]
- iii. If the permittee had a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report. [40 CFR 63.7545(e)(7)]
- iv. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: [40 CFR 63.7545(e)(8)]
 - 1) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." [40 CFR 63.7545(e)(8)(i)]
 - 2) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." [40 CFR 63.7545(e)(8)(ii)]
- g. The permittee must submit each report in Table 9 to 40 CFR 63, Subpart DDDDD that applies. [40 CFR 64.7550(a)]
- h. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. [40 CFR 63.7550(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in 40 CFR 63, Subpart DDDDD. [40 CFR 63.7550(c)]
 - i. If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii). [40 CFR 63.7550(c)(1)]
 - 1) Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]
 - 2) Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]
 - 3) Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]
 - 4) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]
 - 5) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7550(c)(5)(xvii)]
 - j. The permittee must submit all reports required by Table 9 of 40 CFR 63, Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
- k. Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP 022 (S-25) Slab Grinder**

Description: The slab grinder is equipped with a pressure sensor so that the baghouse filters are properly pulsed.

Construction Commenced: 5/30/1996

Maximum Capacity: 135 tons of steel/hr

Control Equipment: Baghouse

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for PM

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements (b)** and **5. Specific Recordkeeping Requirements (b)**.

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission point listed above is assumed to be in compliance with **2. Emission Limitations (b)** when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions**.

- c. The permittee shall not allow emissions of PM from EP 022 to exceed 5 tons/yr on a 12-month rolling total basis. [To preclude 401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- A. Refer to **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c);
- B. Refer to **Appendix A – CAM Plan**; and
- C. Refer to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week and a Reference Method 9 reading simultaneous with a qualitative visual observation once per calendar quarter while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitation in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The baghouse used as the control equipment shall be inspected to ensure its proper operation. Inspection of the baghouse shall consist of: [401 KAR 52:020, Section 10]
 - i. A weekly check of the visible emissions; and
 - ii. A monthly visual inspection of the bags to determine whether they are in proper working condition.
- e. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- f. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Inspections of control equipment required by **4. Specific Monitoring Requirements** (d).
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitation in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- e. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- f. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
- iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.
- 7. Specific Control Equipment Operating Conditions:**
- a. The permittee shall install, operate, and maintain the control device associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP 023 (S-22) Reheat Furnace**

Description: A direct-fired, natural gas reheat furnace.

Model: Stein Heurty

Construction Commenced: 5/30/1996

Maximum Capacity: 250 tons of steel/hr

Maximum Heat Input: 169 MMBtu/hr

Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

1. Operating Limitations:

Natural gas usage shall not exceed 1480 MMscf/yr on a 12-month rolling total basis. [To preclude 401 KAR 51:017]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]
- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission point listed above is assumed to be in compliance with **2. Emission Limitations** (a) and (b) when combusting natural gas.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

The Cabinet determines that the source is in compliance with 401 KAR 63:020 when burning natural gas.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total natural gas usage;
 - ii. The monthly total hours of operation.
- b. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total natural gas usage;
 - ii. The monthly total hours of operation.
- b. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Group 6 – Rolling Mills****EP 024 (S-24) Roughing Mill**

Description: A Hitachi roughing mill.

Construction Commenced: 5/30/1996

Maximum Capacity: 250 tons of steel/hr

Control Equipment: Baghouse

EP 025 (S-22A, S-23b, S-26) Finishing Mill

Description: A Hitachi finishing mill and Steckel coiler with two natural gas burners to maintain metal temperature.

Construction Commenced: 5/30/1996

Maximum Capacity: 250 tons of steel/hr

Maximum Heat Input: 6 MMBtu/hr, each burner (12 MMBtu/hr total)

Control Equipment: Busch centrifugal dust collection system

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for PM

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*, applies only to EP 025.

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions**.

- c. For EP 024 and EP 025, on an individual basis, the permittee shall not allow emissions of PM to exceed 53 tons/yr on a 12-month rolling total basis. [To preclude 401 KAR 51:017]

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- A. Refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c).
B. Refer to **Appendix A – CAM Plan**; and
C. Refer to **7. Specific Control Equipment Operating Conditions**.
- d. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

The Cabinet determines that the source is in compliance with 401 KAR 63:020 when burning natural gas.

3. Testing Requirements:

- a. The permittee shall conduct performance testing for PM to demonstrate compliance with **2. Emission Limitations** (c) and determine an emission factor in pounds per ton of steel processed. The testing for EP 024 shall be conducted no later than June 2026.
- i. The permittee shall use U.S. EPA Reference Method 5 for PM, or an alternate method as approved by the Division;
- ii. EP 024 is the representative unit for EP 025 for the purposes of this testing requirement.
- b. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
- i. The monthly and 12-month rolling total process weight;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. For EP 025, the monthly and 12-month rolling total natural gas usage;
 - iii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week and a Reference Method 9 reading simultaneous with a qualitative visual observation once per calendar quarter while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of PM for each emission point to ensure compliance with the emission limitation in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. The PM control equipment shall be inspected to ensure its proper operation. Inspection of the PM controls shall consist of: [401 KAR 52:020, Section 10]
- i. Weekly check of the visible emissions; and
 - ii. Monthly visual inspection of the inlet and outlet ducting of the controls, as well as their general condition, to determine whether they are in proper working condition.
- e. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- f. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following for each emission point: [401 KAR 52:020, Section 10]
- i. The monthly and 12-month rolling total process weight;
 - ii. For EP 025, the monthly and 12-month rolling total natural gas usage;
 - iii. The monthly and 12-month rolling total hours of operation;
 - iv. Inspection of control equipment required by **4. Specific Monitoring Requirements** (d).
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (b), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitation in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- e. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- f. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
 - iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain the control device(s) associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 7 – Melt Shop Units

Emission Point #	Description	Maximum Capacity	Control Equipment	Construction Commenced
057 (26)	Electric Arc Furnace 1 (EAF #1) and the associated dust handling equipment	154 tons per batch	EAF #1 Baghouse	11/1/1999
105 (105)	Electric Arc Furnace 2 (EAF #2) and the associated dust handling equipment	154 tons per batch	EAF #2 Baghouse	7/1/2003
058 (27)	Argon Oxygen Decarburization 1 (AOD #1) Vessel	165 tons per batch	AOD #1 Baghouse	11/1/1999
106 (106)	Argon Oxygen Decarburization 2 (AOD #2) Vessel	165 tons per batch	AOD #2 Baghouse	7/1/2007
034 (S-34)	Lime Hopper	80 tons/hr	EAF #1 Baghouse	11/1/1999
036 (S-36)	Receiving Bin/ Filling Station	132 tons/hr	EAF #1 Baghouse	11/1/1999
059 (S-28)	4 Argon Oxygen Decarburization Preheaters	13.66 MMBtu/hr, each	AOD #1 Baghouse	11/1/1999; Modified: 9/1/2005; Replaced low NO _x burner with oxyfuel burner: 2009; Modified: 2025
049 (S-49)	11 Ladle Preheaters	8.54 MMBtu/hr, each	AOD #1 Baghouse	11/1/1999; Modified: 9/1/2005; Replaced low NO _x burner with oxyfuel burner: 2009; Modified: 2025

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

401 KAR 60:005, Section 2(2)(jj), 40 C.F.R. 60.270a to 60.276a (Subpart AAa), *Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarbonization Vessels Constructed After August 17, 1983 and On or Before May 16, 2022*, applies to EP 057, EP 058, EP 105, and EP 106.

401 KAR 63:002, Section 2(4)(aaaaa), 40 C.F.R. 63.10680 to 63.10692, Table 1 (Subpart YYYYYY), *National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities*, applies to all EPs listed above except EP 034 and EP 036

40 CFR 64, *Compliance Assurance Monitoring (CAM)*, for PM.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations:

- a. The annual average liquid steel production rates as cast shall not exceed 133 short tons per hour for each EAF and each AOD. [401 KAR 51:017]
- b. The annual total liquid steel produced as cast shall not exceed 1,653,804 U.S short tons (1,500,000 metric tons) on a 12-month rolling basis. [401 KAR 51:017]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (o) and **5. Specific Recordkeeping Requirements** (g).

- c. *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF, the permittee shall comply with the requirements in either 40 CFR 63.10685(a)(1) or (2). The permittee may have certain scrap at the facility subject to 40 CFR 63.10685(a)(1) and other scrap subject to 40 CFR 63.10685(a)(2) provided the scrap remains segregated until charge make-up. [40 CFR 63.10685(a)]
- d. *Pollution prevention plan.* The permittee shall 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 are charged to the furnace. For the production of leaded steel, the permittee 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. The permittee must submit the scrap pollution prevention plan to the Division for approval. The permittee 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. The permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by Division. The permittee shall keep a copy of the plan onsite, and the permittee shall provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan must include the information in 40 CFR 63.10685(a)(1)(i) through (iii): [40 CFR 63.10685(a)(1)]
 - i. 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)]
 - ii. A requirement in the 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)]
 - iii. Procedures for determining if the requirements and specifications in 40 CFR 63.10685(a)(1) 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)]
 - iv. The requirements of 40 CFR 63.10685(a)(1) do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

These exempted materials must be identified in the pollution prevention plan. [40 CFR 63.10685(a)(1)(iv)]

Compliance Demonstration Method:

Refer to 5. Specific Recordkeeping Requirements (d) and (g).

- e. *Restricted metallic scrap.* For the production of steel other than leaded steel, the permittee shall 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. 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 the permittee meets the requirements in 40 CFR 63.10685(b)(3). [40 CFR 63.10685(a)(2)]
- f. For scrap containing motor vehicle scrap, the permittee shall procure the scrap pursuant to one of the compliance options in 40 CFR 63.10685(b)(1), (2), or (3), for each scrap provider, contract, or shipment. The permittee 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)]
 - i. *Site-specific plan for mercury switches.* The permittee shall comply with the requirements in 40 CFR 63.10685(b)(1)(i) through (v). [40 CFR 63.10685(b)(1)]
 - 1) The permittee shall include a requirement in the scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap. [40 CFR 63.10685(b)(1)(i)]
 - 2) The permittee shall prepare and operate according to a plan demonstrating how the facility will implement the scrap specification in 40 CFR 63.10685(b)(1)(i) for removal of mercury switches. The permittee shall submit the plan to the Division for approval. The permittee shall 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 Division within 60 days following disapproval of a plan. The permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the Division. The Division may change the approval status of the plan upon 90-days written notice based upon the semiannual compliance report or other information. The plan shall 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

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the Division, the permittee shall 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 40 CFR 63.10685(b)(1)(ii)(C). [40 CFR 63.10685(b)(1)(ii)(D)]
- 3) The permittee shall require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Division may request documentation or additional information at any time. [40 CFR 63.10685(b)(1)(iii)]
 - 4) The permittee shall establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under 40 CFR 63.10685(b)(1) may require only the removal of convenience light switch mechanisms, the Division 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(b)(1)(iv)]
- ii. *Option for approved mercury programs.* The permittee shall certify in the notification of compliance status that the permittee participates in and purchases 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 40 CFR 63.10685(b)(2)(i) through (iii). If motor vehicle scrap is purchased from a broker, the permittee shall 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 40 CFR 63.10685(b)(2)(i) through (iii). The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under 40 CFR 63.10685(b)(2) unless and until the Administrator disapproves the program (in part or in whole) under 40 CFR 63.10685(b)(2)(iii). [40 CFR 63.10685(b)(2)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 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 40 CFR 63.10685(b)(2) 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) The permittee shall develop and maintain onsite a plan demonstrating the manner through which the facility is participating in an EPA-approved program. [40 CFR 63.10685(b)(2)(iv)]
 - A. The plan shall 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. The permittee shall 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 Division, the permittee shall 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. The permittee shall 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)]
- iii. *Option for specialty metal scrap.* The permittee shall certify in the notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches. [40 CFR 63.10685(b)(3)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- g. *Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in 40 CFR 63.10685(b)(1) through (3), the permittee shall certify in the annual compliance certification and maintain records of documentation that this scrap does not contain motor vehicle scrap. [40 CFR 63.10685(b)(4)]

Compliance Demonstration Method:

For **1. Operating Limitations** (e) through (g), refer to **5. Specific Recordkeeping Requirements** (d), (e), and (f), **6. Specific Reporting Requirements** (g), (h), (i), and (j).

- h. The permittee shall install, operate, and maintain a capture system that collects the emissions from the 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)]

Compliance Demonstration Method

Refer to **4. Specific Monitoring Requirements** (c), (d), (e), (f), (g), (h), (i), (j), and (l), **5. Specific Recordkeeping Requirements** (a), and **6. Specific Reporting Requirements** (b).

- i. In accordance with 40 CFR 63, Subpart A, the permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. The SSM plan shall meet the requirements in 40 CFR 63.6(e)(3). [40 CFR 63, Subpart YYYYY, Table 1]

Compliance Demonstration Method:

Refer to **5. Specific Recordkeeping Requirements** (g).

- j. For EP 059: [401 KAR 51:017]
- i. The permittee shall not operate more than 3 AOD preheaters simultaneously when 2 EAFs and 2 AODs are operating.
 - ii. Total annual gas usage for AOD preheaters shall not exceed 239 MMscf per year while using oxyfuel burners, on a 12-month rolling basis.
- k. For EP 049: [401 KAR 51:017]
- i. The permittee shall not operate more than 9 ladle preheaters simultaneously when 2 EAFs and 2 AODs are operating.
 - ii. Total annual gas usage for ladle preheaters shall not exceed 673 MMscf per year while using oxyfuel burners, on a 12-month rolling basis.

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (o) and **5. Specific Recordkeeping Requirements** (g).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Compliance with **2. Emission Limitations** (a) is assumed when complying with **2. Emission Limitations** (b)(i)-(iii).

- b. The permittee shall not discharge or cause to be discharged into the atmosphere from an EAF or an AOD vessel any gases which: [40 CFR 60.272a(a); 40 CFR 63.10686(b)]
 - i. 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) and 40 CFR 63.10686(b)(1)]
 - ii. Exit from a control device and exhibit 3 percent opacity or greater, as measured in accordance with EPA Method 9 of appendix A of 40 CFR part 60, or, as an alternative, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271; and [40 CFR 60.272a(a)(2)]
 - iii. Exit from any melt shop opening, due solely to the operations of EAF(s) or AOD vessel(s), exhibit 6 percent opacity or greater, as measured in accordance with EPA Method 9 of appendix A of 40 CFR part 60, or, as an alternative, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271. 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 60.272a(a)(3); 40 CFR 63.10686(b)(2)]
 - iv. From the dust-handling system, exhibit 10 percent opacity or greater, as measured in accordance with EPA Method 9 of appendix A of 40 CFR part 60, or, as an alternative, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271. [40 CFR 60.272a(b)]

Compliance Demonstration Method:

- A. For **2. Emission Limitations** (b)(i), to **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements**, and **6. Specific Reporting Requirements**.
- B. For **2. Emission Limitations** (b)(ii) and (iii) refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements** (a), **5. Specific Recordkeeping Requirements** (c), and **6. Specific Reporting Requirements**.
- C. For **2. Emission Limitations** (b)(iv) refer to **3. Testing Requirements**, **4. Specific Monitoring Requirements** (b) or (c), **5. Specific Recordkeeping Requirements** (c), and **6. Specific Reporting Requirements**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
- i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$
- Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions**.

- d. The permittee shall not allow emissions of CO, PM, Lead, NO_x, and VOC to exceed the limits in the following table: [401 KAR 51:017]

Combined Stack	Emission Point #	CO	PM	Lead	NO _x	VOC
EAF #1 Baghouse	057, 036, & 034	2 lb/ton; 265.76 lb/hr	0.10 lb/ton; 13.94 lb/hr	0.001 lb/ton; 0.167 lb/hr	1.32 lb/ton; 175 lb/hr	0.150 lb/ton; 19.95 lb/hr
EAF #2 Baghouse	105	2 lb/ton; 266 lb/hr	0.193 lb/ton; 25.71 lb/hr	0.002 lb/ton; 0.309 lb/hr	1.00 lb/ton; 133 lb/hr	0.15 lb/ton; 19.95 lb/hr
AOD #1 Baghouse	058, 059, & 049	2.06 lb/ton; 273.75 lb/hr	0.13 lb/ton; 16.98 lb/hr	0.002 lb/ton; 0.204 lb/hr	0.578 lb/ton; 76.83 lb/hr	---
AOD #2 Baghouse	106	2.06 lb/ton; 273.98 lb/hr	0.193 lb/ton; 25.71 lb/hr	0.002 lb/ton; 0.31 lb/hr	0.58 lb/ton; 76.87 lb/hr	---

* Note: Limits are averaged over 3 heats.

- e. The permittee shall not allow emissions of CO, PM, Lead, NO_x, and VOC to exceed the limits in the following table, on a 12-month rolling total basis: [401 KAR 51:017]

Emission Point #	CO	PM	Lead	NO _x	VOC
057 & 105 (combined)	1653.36 ton/yr	138.24 ton/yr	1.66 ton/yr	1010.86 ton/yr	124.04 ton/yr
058 & 106 (combined)	1703 ton/yr	138.24 ton/yr	1.70 ton/yr	477.87 ton/yr	---

- f. Graphite electrode sulfur content shall not exceed 0.02% for EP 057 and EP 105, on an individual basis. [401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

The permittee shall demonstrate compliance with **2. Emission Limitations** (d) - (f) as follows:

- A. Refer to **3. Testing Requirements** (a).
- B. Refer to **4. Specific Monitoring Requirements** (p) and (q), and **5. Specific Recordkeeping Requirements** (g) and (h).
- C. Refer to **Appendix A – CAM Plan**; and
- D. Refer to **7. Specific Control Equipment Conditions**.

3. Testing Requirements:

- a. Annual Performance tests to demonstrate compliance with **2. Emission Limitations** (d) and (e) shall be conducted starting no later than 180 days after the issuance of the final permit V-23-003 for CO, PM, NOx, lead, and VOC. If two consecutive annual tests result in specified emissions being less than or equal to 75% of the standard for that pollutant, specified herein, then no additional testing shall be required for that pollutant during the term of permit V-23-003. [401 KAR 51:017]
- b. During performance tests required in 40 CFR 60.8, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric filter in any pressurized fabric filter collector, unless the amount of dilution is separately determined and considered in the determination of emissions. [40 CFR 60.275a(a)]
- c. When emissions from the EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa but controlled by a common capture system and control device, the permittee shall use either or both of the following procedures during a performance test (see also 40 CFR 60.276a(e)): [40 CFR 60.275a(b)]
 - i. Determine compliance using the combined emissions. [40 CFR 60.275a(b)(1)]
 - ii. Use a method that is acceptable to the Division and that compensates for the emissions from the facilities not subject to the provisions of 40 CFR 60, Subpart AAa. [40 CFR 60.275a(b)(2)]
 - iii. Any combination of the criteria of 40 CFR 60.275a(b)(1) and (b)(2). [40 CFR 60.275a(b)(3)]
- d. When emission from the EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, compliance with 40 CFR 60.272a(a)(3) will be based on emissions from only the affected facility(ies). The permittee may use operational knowledge to determine the facilities that are the sources, in whole or in part, of any emissions observed in demonstrations of compliance with 40 CFR 60.272a(a)(3). [40 CFR 60.275a(c)]
- e. In conducting the performance tests required in 40 CFR 60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.275a, except as provided in 40 CFR 60.8(b). [40 CFR 60.275a(d)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. The permittee shall determine compliance with the particulate matter standards in 40 CFR 60.272a as follows: [40 CFR 60.275a(e)]
 - i. EPA Method 5 (and referenced EPA Methods 1, 2, 3, 3A, 3B, and 4) shall be used for negative-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and, when a single EAF or AOD vessel is sampled, the sampling time shall include an integral number of heats. The manual portions only and not the instrumental portion of the voluntary consensus standard ANSI/ASME PTC 19-10-1981 (incorporated by reference, see 40 CFR 60.17) is an acceptable alternative to EPA Methods 3, 3A, and 3B. [40 CFR 60.275a(e)(1)]
 - ii. EPA Method 9 or, as an alternative, ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271, and the procedures of 40 CFR 60.11 shall be used to determine opacity. [40 CFR 60.275a(e)(3)]
 - iii. To demonstrate compliance with 40 CFR 60.272a(a) (1), (2), and (3), the EPA Method 9 test runs shall be conducted concurrently with the particulate matter test runs unless inclement weather interferes. [40 CFR 60.275a(e)(4)]
- g. To comply with 40 CFR 60.274a(c), (f), (g), and (h), the permittee shall obtain the information required in these requirements during the particulate matter runs. [40 CFR 60.275a(f)]
- h. Any control device subject to the provisions of 40 CFR 60, Subpart AAa shall be designed and constructed to allow measurement of emissions using applicable test methods and procedures. [40 CFR 60.275a(g)]
- i. Where emissions from the EAF(s) or AOD vessel(s) are combined with emissions from facilities not subject to the provisions of 40 CFR 60, Subpart AAa, determinations of compliance with 40 CFR 60.272a(a)(3) will only be based upon emissions originating from the affected facility(ies), except if the combined emissions are controlled by a common capture system and control device, in which case the permittee may use any of the following procedures during an opacity performance test and during shop opacity observations: [40 CFR 60.275a(i)]
 - i. Base compliance on control of the combined emissions; or [40 CFR 60.275a(i)(1)]
 - ii. Utilize a method acceptable to the Administrator that compensates for the emissions from the facilities not subject to the provisions of 40 CFR 60, Subpart AAa. [40 CFR 60.275a(i)(2)]
- j. Unless the presence of inclement weather makes concurrent testing infeasible, the permittee shall conduct concurrently the performance tests required under 40 CFR 60.8 to demonstrate compliance with 40 CFR 60.272a(a)(1), (2), and (3). [40 CFR 60.275a(i)]
- k. When the permittee is required to demonstrate compliance with the standard under 40 CFR 60.275a(b)(2) or a combination of 40 CFR 60.275a(b)(1) and (b)(2) the permittee shall provide notice to the Division of the procedure(s) that will be used to determine

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

compliance. Notification of the procedure(s) to be used must be postmarked at least 30 days prior to the performance test. [40 CFR 60.276a(e)]

- l. For the purpose of 40 CFR 60, Subpart AAa, the permittee shall conduct the demonstration of compliance with 40 CFR 60.272a(a) and furnish the Division with a written report of the results of the test. This report shall include the following information. [40 CFR 60.276a(f)]
 - i. Facility name and address; [40 CFR 60.276a(f)(1)]
 - ii. Plant representative; [40 CFR 60.276a(f)(2)]
 - iii. Make and model of the control device, and continuous opacity monitoring equipment, if applicable; [40 CFR 60.276a(f)(3)]
 - iv. Flow diagram of process and emission capture system including other equipment or process(es) ducted to the same control device; [40 CFR 60.276a(f)(4)]
 - v. Rated (design) capacity of process equipment; [40 CFR 60.276a(f)(5)]
 - vi. Those data required under 40 CFR 60.274a(h); [40 CFR 60.276a(f)(6)]
 - 1) List of charge and tap weights and materials; [40 CFR 60.276a(f)(6)(i)]
 - 2) Heat times and process log; [40 CFR 60.276a(f)(6)(ii)]
 - 3) Control device operation log; and [40 CFR 60.276a(f)(6)(iii)]
 - 4) Continuous opacity monitor or EPA Method 9 data, or, as an alternative to EPA Method 9, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271. [40 CFR 60.276a(f)(6)(iv)]
 - vii. Test dates and test times; [40 CFR 60.276a(f)(7)]
 - viii. Test company; [40 CFR 60.276a(f)(8)]
 - ix. Test company representative; [40 CFR 60.276a(f)(9)]
 - x. Test observers from any outside agency; [40 CFR 60.276a(f)(10)]
 - xi. Description of test methodology used, including any deviation from standard reference methods; [40 CFR 60.276a(f)(11)]
 - xii. Schematic of sampling location; [40 CFR 60.276a(f)(12)]
 - xiii. Number of sampling points; [40 CFR 60.276a(f)(13)]
 - xiv. Description of sampling equipment; [40 CFR 60.276a(f)(14)]
 - xv. Listing of sampling equipment calibrations and procedures; [40 CFR 60.276a(f)(15)]
 - xvi. Field and laboratory data sheets; [40 CFR 60.276a(f)(16)]
 - xvii. Description of sample recovery procedures; [40 CFR 60.276a(f)(17)]
 - xviii. Sampling equipment leak check results; [40 CFR 60.276a(f)(18)]
 - xix. Description of quality assurance procedures; [40 CFR 60.276a(f)(19)]
 - xx. Description of analytical procedures; [40 CFR 60.276a(f)(20)]
 - xxi. Notation of sample blank corrections; and [40 CFR 60.276a(f)(21)]
 - xxii. Sample emission calculations. [40 CFR 60.276a(f)(22)]
- m. Within 60 days after the date of completing each performance test or demonstration of compliance required by 40 CFR 60, Subpart AAa, the permittee must submit the results of the performance test following the procedures specified in 40 CFR 60.276a(i)(1) through (3). [40 CFR 60.276a(i)]
 - i. Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic->

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The data must be submitted in a file format generated using the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. [40 CFR 60.276a(i)(1)]
- ii. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI. [40 CFR 60.276a(i)(2)]
 - iii. Confidential business information (CBI). Do not use CEDRI to submit information the permittee claims as CBI. Anything submitted using CEDRI cannot later be claimed CBI. If the permittee wishes to assert a CBI claim for some of the information submitted under 40 CFR 60.276(i)(1) or (2), the permittee must meet the requirements detailed in 40 CFR 60.276a(i)(3). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. [40 CFR 60.276a(i)(3)]
- n. Except as provided in 40 CFR 63.10686(d)(6), the permittee shall conduct performance tests to demonstrate initial compliance with the applicable emissions limit for each emissions source subject to an emissions limit in 40 CFR 63.10686(b). [40 CFR 63.10686(d)]
- o. The permittee must conduct each PM performance test for the EAF or AOD vessel according to the procedures in 40 CFR 63.7 and 40 CFR 60.275a using the following test methods in 40 CFR part 60, appendices A-1, A-2, A-3, and A-4: [40 CFR 63.10686(d)(1)]
- i. Method 1 or 1A of appendix A-1 of 40 CFR part 60 to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device prior to any releases of the atmosphere. [40 CFR 63.10686(d)(1)(i)]
 - ii. Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-1 of 40 CFR part 60 to determine the volumetric flow rate of the stack gas. [40 CFR 63.10686(d)(1)(ii)]
 - iii. Method 3, 3A, or 3B of appendix A-3 of 40 CFR part 60 to determine the dry molecular weight of the stack gas. The permittee may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses" (incorporated by reference – see 40 CFR 63.14) as an alternative to EPA method 3B. [40 CFR 63.10686(d)(1)(iii)]
 - iv. Method 4 of appendix A-3 of 40 CFR part 60 to determine the moisture content of the stack gas. [40 CFR 63.10686(d)(1)(iv)]
 - v. Method 5 or Method 5D of appendix A-3 of 40 CFR part 60 to determine the PM concentration. Three valid test runs are needed to comprise a PM performance test.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

For the EAF, sample only when metal is being melted and refined. For AOD vessels, sample only when the operation(s) are being conducted. [40 CFR 63.10686(d)(1)(v)]

- p. The permittee shall conduct each opacity test for the melt shop according to the procedures in 40 CFR 63.6(h) and Method 9 of appendix A-4 of 40 CFR part 60. When emissions from any EAF or AOD vessel are combined with emissions from emission sources not subject to 40 CFR 63, Subpart YYYYYY, the permittee must demonstrate compliance with the melt shop opacity limit based on emissions from only the emission sources subject to 40 CFR 63, Subpart YYYYYY. [40 CFR 63.10686(d)(2)]
- q. During any performance test, the permittee shall monitor and record the information specified in 40 CFR 60.274a(h) for all heats covered by the test. [40 CFR 63.10686(d)(3)]
- r. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. Observations of the opacity of the visible emissions from the control device must be performed by a certified visible emission observer and the permittee shall install and operate a bag leak detection system according to 40 CFR 60.273a(e) whenever the control device is being used to remove particulate matter from the EAF or AOD. [40 CFR 60.273a(c)(1)(ii)]
 - i. Visible emission observations shall be conducted at least once per day of the control device 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 EPA Method 9, or, as an alternative, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271. [40 CFR 60.273a(c)(2)]
 - ii. 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 points relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In that case, the EPA Method 9 observations must be made for the point 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 40 CFR 60.272a(a)(2). [40 CFR 60.273a(c)(3)]
- b. A furnace static pressure monitoring device is not required on any EAF equipped with a Direct-shell Evacuation Control (DEC) system if observations of shop opacity are performed by a certified visible emission observer as follows: [40 CFR 60.273a(d)]
 - i. At least once per day when the furnace is operating. [40 CFR 60.273a(d)(1)]
 - ii. No less than once per week, during the heat cycle as defined in 40 CFR 60.271a, melt shop with more than one EAF shall conduct these readings while all EAFs are in

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- operation. All EAFs are not required to be on the same schedule for tapping. [40 CFR 60.273a(d)(2)]
- iii. 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 EPA Method 9, or, as an alternative, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271. [40 CFR 60.273a(d)(3)]
 - iv. Shop opacity shall be recorded for any point(s) where visible emissions are observed.
 - v. Where it is possible to determine that a number of visible emission points 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 point of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.
- c. Except as provided under 40 CFR 60.274a(e), the permittee shall: [40 CFR 60.274a(b)]
- i. Monitor and record once per shift the block 15-minute average furnace static pressure (if a DEC system is in use, and a furnace static pressure gauge is installed according to 40 CFR 60.274a(f)) and either: [40 CFR 60.274a(b)(1)]
 - 1) Install, calibrate, and maintain a monitoring device that continuously records the capture system fan motor amperes and damper position(s); [40 CFR 60.274a(b)(1)(i)]
 - 2) Monitor and record as no greater than 15-minute integrated block average basis the volumetric flow rate through each separately ducted hood; or [40 CFR 60.274a(b)(1)(ii)]
 - 3) Install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and record damper position(s). [40 CFR 60.274a(b)(1)(iii)]
 - ii. The volumetric flow monitoring device(s) may be installed in any appropriate location in the capture system 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 permittee to demonstrate the accuracy of the monitoring device(s) relative to EPA Methods 1 and 2 of appendix A of 40 CFR part 60. [40 CFR 60.274a(b)(2)]
 - iii. Parameters monitored pursuant to 40 CFR 60.274a(b), excluding damper position, shall be recorded as integrated block averages not to exceed 15 minutes. [40 CFR 60.274a(b)(3)]
- d. When the permittee is required to demonstrate compliance with the standards under 40 CFR 60.272a(a)(3) and at any other time that the Administrator may require (under section 114 of the CAA, as amended), the permittee shall, during periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to 40 CFR 63.274a(b), either: [40 CFR 60.274a(c)(1)]
- i. Install, calibrate, and maintain a monitoring device that continuously records the fan motor amperes at each damper position, and damper position consistent with 40 CFR 60.274a(h)(5); or [40 CFR 60.274a(c)(1)(i)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Monitor and record as no greater than 15-minute integrated block average basis the volumetric flow rate through each separately ducted hood; or [40 CFR 60.274a(c)(1)(ii)]
- iii. Install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and monitor and record the damper position consistent with 40 CFR 60.274a(h)(5) of 40 CFR 60.274a. [40 CFR 60.274a(c)(1)(iii)]
- e. Parameters monitored pursuant to 40 CFR 60.274a(c), excluding damper position, shall be recorded as integrated block averages not to exceed 15 minutes; and [40 CFR 60.274a(c)(2)]
- f. The permittee may petition the Division for reestablishment of these parameters whenever the permittee can demonstrate to the Division's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of the parameters as determined during the most recent demonstration of compliance shall be the appropriate operational range or control set point throughout each applicable period. Operation at values beyond the accepted operational range or control set point may be subject to the requirements of 40 CFR 60.276a(c). [40 CFR 60.274a(c)(3)]
- g. Except as provided under 40 CFR 60.274a(e), the permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the capture system (*i.e.*, pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (*e.g.*, presence of holes in ductwork or hoods, flow constrictions caused by dents or excess accumulations of dust in ductwork, and fan erosion) and building inspections to ensure that the building does not have any holes or other openings for particulate matter laden air to escape. Any deficiencies that are determined by the operator to materially impact the efficacy of the capture system shall be noted and proper maintenance performed. [40 CFR 60.274a(d)]
- h. The permittee may petition the Division to approve any alternative to either the monitoring requirements specified in 40 CFR 60.274a(b) or the monthly operational status inspections specified in 40 CFR 60.274a(d) if the alternative will provide a continuous record of operation of each emission capture system. [40 CFR 60.274a(e)]
- i. Except as provided for under 40 CFR 60.273a(d), if emissions during any phase of the heat cycle are controlled by the use of a DEC system, the permittee shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as no greater than 15-minute integrated block averages. The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of ± 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions. [40 CFR 60.274a(f)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- j. Except as provided for under 40 CFR 60.273a(d), when the permittee of an EAF controlled by a DEC is required to demonstrate compliance with the standard under 40 CFR 60.272a(a)(3), and at any other time the Administrator may require (under section 114 of the Clean Air Act, as amended), the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring device required under 40 CFR 60.274a(f). The permittee may petition the Division for reestablishment of the pressure whenever the permittee can demonstrate to the Division's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. The pressure range or control setting during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a melting and refining period. Continuous operation at pressures higher than the operational range or control setting may be considered by the Division to be unacceptable operation and maintenance of the affected facility. [40 CFR 60.274a(g)]
- k. During any performance test required under 40 CFR 60.8, and for any report thereof required by 40 CFR 60.276a(f), or to determine compliance with 40 CFR 60.272a(a)(3), the permittee must monitor the following information for all heats covered by the test: [40 CFR 63.10686(d)(3), 40 CFR 60.274a(h)]
 - i. Charge weights and materials, and tap weights and materials; [40 CFR 60.274a(h)(1)]
 - ii. Heat times, including start and stop times, and a log of process operation, including periods of no operation during testing and, if a furnace static pressure monitoring device is operated pursuant to 40 CFR 60.274a(f), the pressure inside an EAF when DEC systems are used; [40 CFR 60.274a(h)(2)]
 - iii. Control device operation log; [40 CFR 60.274a(h)(3)]
 - iv. Continuous opacity monitor or EPA Method 9 data, or, as an alternative to EPA Method 9, according to ASTM D7520-16 (incorporated by reference, see 40 CFR 60.17), with the caveats described under *Shop opacity* in 40 CFR 60.271; [40 CFR 60.274a(h)(4)]
 - v. All damper positions, no less frequently than performed in the latest melt shop opacity compliance test for a full heat, if selected as a method to demonstrate compliance under 40 CFR 60.274a(b); [40 CFR 60.274a(h)(5)]
 - vi. Fan motor amperes at each damper position, if selected as a method to demonstrate compliance under 40 CFR 60.274a(b); [40 CFR 60.274a(h)(6)]
 - vii. Volumetric air flow rate through each separately ducted hood, if selected as a method to demonstrate compliance under 40 CFR 60.274a(b); and [40 CFR 60.274a(h)(7)]
 - viii. Static pressure at each separately ducted hood, if selected as a method to demonstrate compliance under 40 CFR 60.274a(b). [40 CFR 60.274a(h)(8)]
 - ix. Parameters monitored pursuant to 40 CFR 60.274a(h)(6) through (8) shall be recorded as integrated block averages not to exceed 15 minutes. [40 CFR 60.274a(h)(9)]
- l. The permittee shall monitor the capture system and PM control device required by 40 CFR 63, Subpart YYYYYY, maintain records, and submit reports according to the compliance assurance monitoring requirements in 40 CFR part 64. The exemption in 40 CFR 64.2(b)(1)(i) for emissions limitations or standards proposed after November 15, 1990 under section 111 or 112 of the CAA does not apply. In lieu of the deadlines for

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

submittal in 40 CFR 64.5, the permittee shall submit the monitoring information required by 40 CFR 64.4 to the Division for approval by no later than startup of the affected source and operate according to the approved plan by no later than 180 days after the date of approval by the Division. Refer to **Appendix A**. [40 CFR 63.10686(e)]

- m. Upon detecting an excursion or exceedance (as defined in the appropriate CAM plan), the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [40 CFR 64.7(d)(1)]
- n. Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance (as defined in the CAM plan) will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [40 CFR 64.7(d)(2)]
- o. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month steel production rate (as measured as the total tons of steel cast);
 - ii. The monthly and 12-month rolling total hours of operation;
 - iii. The monthly and 12-month rolling process weight rate for each emission point;
 - iv. The monthly and 12-month rolling natural gas combusted (MMscf).
 - v. An operating log of the preheaters with the EAD/AOD operation, except when the preheaters are interlocked with the operation of EAFs and AODs to control the number of preheaters operating simultaneously.
- p. The permittee shall calculate monthly and 12-month rolling emissions of PM, CO, NO_x, VOC, and Lead to ensure compliance with the emissions limits listed in **2. Emission Limitations (d) – (e)**.
- q. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- r. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following information: [40 CFR 60.274a(a)]
 - i. All data obtained under 40 CFR 60.274a(b); and [40 CFR 60.274a(a)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. All monthly operational status inspections performed under 40 CFR 60.274a(c). [40 CFR 60.274a(a)(2)]
- b. Records of the measurements required in 40 CFR 60.274a must be retained for at least 5 years following the date of the measurement. [40 CFR 60.276a(a)]
- c. The permittee shall maintain records of all shop opacity observations made in accordance with 40 CFR 60.273a(d). All shop opacity observations in excess of the emission limit specified in 40 CFR 60.272a(a)(3) shall indicate a period of excess emissions, and shall be reported to Division semi-annually, according to 40 CFR 60.7(c) and submitted according to 40 CFR 60.276a(j). In addition to the information required at 40 CFR 60.7(c), the report shall include the following information: [40 CFR 60.276a(g)]
 - i. The company name and address of the affected facility. [40 CFR 60.276a(g)(1)]
 - ii. An identification of each affected facility being included in the report. [40 CFR 60.276a(g)(2)]
 - iii. Beginning and ending dates of the reporting period. [40 CFR 60.276a(g)(3)]
 - iv. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [40 CFR 60.276a(g)(4)]
- d. In addition to the records required by 40 CFR 63.10, the permittee shall keep records to demonstrate compliance with the requirements for the pollution prevention plan in 40 CFR 63.10685(a)(1) and/or for the use of only restricted scrap in 40 CFR 63.10685(a)(2) and for mercury in 40 CFR 63.10685(b)(1) through (3) as applicable. The permittee shall keep records documenting compliance with 40 CFR 63.10685(b)(4) for scrap that does not contain motor vehicle scrap. [40 CFR 63.10685(c)]
- e. If the permittee is subject to the requirements for a site-specific plan for mercury under 40 CFR 63.10685(b)(1), the permittee shall maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered. [40 CFR 63.10685(c)(1)(i)]
- f. If the permittee is subject to the option for approved mercury programs under 40 CFR 63.10685(b)(2), the permittee shall maintain records identifying each scrap provider and documenting the scrap provider's participation in an approved mercury switch removal program. If the permittee purchases motor vehicle scrap from a broker, the permittee shall maintain records identifying each broker and documentation that all scrap provided by the broker was obtained from other scrap providers who participate in an approved mercury switch removal program. [40 CFR 63.10685(c)(2)]
- g. The permittee shall maintain records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month steel production rate (as measured as the total tons of steel cast);
 - ii. The monthly and 12-month rolling total hours of operation.

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- iii. The monthly and 12-month rolling process weight rate for each emission point;
 - iv. The monthly and 12-month rolling natural gas combusted (MMscf);
 - v. The graphite electrode sulfur content.
 - vi. An operating log of the preheaters with the EAD/AOD operation, except when the preheaters are interlocked with the operation of EAFs and AODs to control the number of preheaters operating simultaneously.
 - vii. The SSM Plan required by **1. Operating Limitations (i)**.
- h. The permittee shall keep records of monthly and 12-month rolling emissions of PM, CO, NO_x, VOC, and Lead to ensure compliance with the emissions limits listed in **2. Emission Limitations (d) and (e)**.
- i. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- j. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- k. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. The permittee shall submit a written report of exceedances of the control device opacity to the Division semi-annually. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity of emissions from the control device is 3 percent or greater. [40 CFR 60.276a(b)]
- b. Continuous operation at a furnace static pressure that exceeds the operational range or control setting under 40 CFR 60.274a(g), for the permittee that elects to install a furnace static pressure monitoring device under 40 CFR 60.273a(f) and either operation of control system fan motor amperes at values exceeding ± 15 percent of the value established under 40 CFR 60.274a(c) or operation at flow rates lower than those established under 40 CFR 60.274a(c) may be considered by the Division to be unacceptable operation and maintenance of the affected facility. Operation at such values shall be reported to the Division semiannually. [40 CFR 60.276a(c)]
- c. The permittee must submit a report of excess emissions and monitoring systems performance report according to 40 CFR 60.7(c) to the Administrator semiannually. Submit all reports to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI

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to submit information the permittee claims as CBI. Anything submitted using CEDRI cannot later be claimed CBI. The permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for 40 CFR 60, Subpart AAa. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in 40 CFR 60, Subpart AAa, regardless of the method in which the report is submitted. Although the EPA does not expect persons to assert a claim of CBI, if the permittee wishes to assert a CBI claim, follow 40 CFR 60.276a(i)(3) except send to the attention of the Electric Arc Furnace Sector Lead. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in 40 CFR 60.276a(j). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. [40 CFR 60.276a(j)]

- d. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.276(k)(1) through (7). [40 CFR 60.276a(k)]
 - i. The permittee must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems. [40 CFR 60.276a(k)(1)]
 - ii. The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due. [40 CFR 60.276a(k)(2)]
 - iii. The outage may be planned or unplanned. [40 CFR 60.276a(k)(3)]
 - iv. The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.276a(k)(4)]
 - v. The permittee must provide to the Administrator a written description identifying: [40 CFR 60.276a(k)(5)]
 - 1) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable; [40 CFR 60.276a(k)(5)(i)]
 - 2) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage; [40 CFR 60.276a(k)(5)(ii)]
 - 3) A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.276a(k)(5)(iii)]
 - 4) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.276a(k)(5)(iv)]
 - vi. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.276a(k)(6)]
 - vii. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. [40 CFR 60.276a(k)(7)]

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- e. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 60.276(l)(1) through (5). [40 CFR 60.276a(l)]
 - i. The permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). [40 CFR 60.276a(l)(1)]
 - ii. The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting. [40 CFR 60.276a(l)(2)]
 - iii. The permittee must provide to the Administrator: [40 CFR 60.276a(l)(3)]
 - 1) A written description of the force majeure event; [40 CFR 60.276a(l)(3)(i)]
 - 2) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; [40 CFR 60.276a(l)(3)(ii)]
 - 3) A description of measures taken or to be taken to minimize the delay in reporting; and [40 CFR 60.276a(l)(3)(iii)]
 - 4) The date by which the permittee proposes to report, or if the permittee has already met the reporting requirement at the time of the notification, the date the permittee reported. [40 CFR 60.276a(l)(3)(iv)]
 - iv. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [40 CFR 60.276a(l)(4)]
 - v. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. [40 CFR 60.276a(l)(5)]
- f. Any records required to be maintained by 40 CFR 60, Subpart AAa that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to the Division or the EPA as part of an on-site compliance evaluation. [40 CFR 60.276a(m)]
- g. For each scrap provider subject to a site-specific plan for mercury switches, the permittee shall submit semiannual progress reports to the Division 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-

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

permitted facilities or otherwise properly managed pursuant to RCRA subtitle C regulations referenced in 40 CFR 63.10685(b)(1)(ii)(A). This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The Division 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(b)(1)(v)]

- h. If the permittee is subject to the requirements for a site-specific plan for mercury under 40 CFR 63.10685(b)(1), the permittee shall submit semiannual reports of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and a certification that the recovered mercury switches were recycled at RCRA-permitted facilities. The semiannual reports must include a certification that the permittee has conducted inspections or taken other means of corroboration as required under 40 CFR 63.10685(b)(1)(ii)(C). The permittee may include this information in the semiannual compliance reports required under 40 CFR 63.10685(c)(3). [40 CFR 63.10685(c)(1)(ii)]
- i. The permittee shall submit semiannual compliance reports to the Administrator for the control of contaminants from scrap according to the requirements in 40 CFR 63.10(e). The report must clearly identify any deviation from the requirements in 40 CFR 63.10685(a) and (b) and the corrective action taken. The permittee shall identify which compliance option in 40 CFR 63.10685(b) applies to each scrap provider, contract, or shipment. [40 CFR 63.10685(c)(3)]
- j. The notification of compliance status required by 40 CFR 63.9(h) must include each applicable certification of compliance, signed by a responsible official, in 40 CFR 63.10690(b)(1) through (6). [40 CFR 63.10690(b)]
 - i. For the pollution prevention plan requirements in 40 CFR 63.10685(a)(1): "This facility has submitted a pollution prevention plan for metallic scrap selection and inspection in accordance with 40 CFR 63.10685(a)(1)"; [40 CFR 63.10690(b)(1)]
 - ii. For the restrictions on metallic scrap in 40 CFR 63.10685(a)(2): "This facility complies with the requirements for restricted metallic scrap in accordance with 40 CFR 63.10685(a)(2)"; [40 CFR 63.10690(b)(2)]
 - iii. For the mercury requirements in 40 CFR 63.10685(b): [40 CFR 63.10690(b)(3)]
 - 1) "This facility has prepared a site-specific plan for mercury switches in accordance with 40 CFR 63.10685(b)(1)"; [40 CFR 63.10690(b)(3)(i)]
 - 2) "This facility participates in and purchases motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the EPA Administrator in accordance with 40 CFR 63.10685(b)(2)" and has prepared a plan demonstrating how the facility participates in the EPA-approved program in accordance with 40 CFR 63.10685(b)(2)(iv); [40 CFR 63.10690(b)(3)(ii)]
 - 3) "The only materials from motor vehicles in the scrap charged to an electric arc furnace at this facility are materials recovered for their specialty alloy content in

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- accordance with 40 CFR 63.10685(b)(3) which are not reasonably expected to contain mercury switches”; or [40 CFR 63.10690(b)(3)(iii)]
- 4) “This facility complies with the requirements for scrap that does not contain motor vehicle scrap in accordance with 40 CFR 63.10685(b)(4).” [40 CFR 63.10690(b)(3)(iv)]
- iv. This certification of compliance for the capture system requirements in 40 CFR 63.10686(a), signed by a responsible official: “This facility operates a capture system for each electric arc furnace and argon-oxygen decarburization vessel that conveys the collected emissions to a PM control device in accordance with 40 CFR 63.10686(a)”. [40 CFR 63.10690(b)(4)]
- v. If applicable, this certification of compliance for the performance test requirements in 40 CFR 63.10686(d)(6): “This facility certifies initial compliance with the applicable emissions limit in 40 CFR 63.10686(a) or (b) based on the results of a previous performance test in accordance with 40 CFR 63.10686(d)(6)”. [40 CFR 63.10690(b)(5)]
- vi. This certification of compliance for the monitoring requirements in 40 CFR 63.10686(e), signed by a responsible official: “This facility has developed and submitted proposed monitoring information in accordance with 40 CFR part 64”. [40 CFR 63.10690(b)(6)]
- k. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring under CAM did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Division and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.7(e)]
- l. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- m. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
- i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
- ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
- iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
- iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
 - n. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
 - o. Refer to **SECTION F** for general reporting requirements.
7. **Specific Control Equipment Operating Conditions:**
- a. A bag leak detection system shall be installed on all single-stack fabric filters and operated whenever the control device is being used to remove particulate matter from the EAF or AOD vessel if the permittee elects not to install and operate a continuous opacity monitoring system as provided for 40 CFR 60.273a(c). In addition, the permittee shall meet the visible emissions observation requirements in 40 CFR 60.273a(c). 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)]
 - i. The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less. [40 CFR 60.273a(e)(1)]
 - ii. The bag leak detection system sensor must provide output of relative particulate matter loadings and the permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.) [40 CFR 60.273a(e)(2)]
 - iii. The bag leak detection system must be equipped with an alarm system that will activate when an increase in relative particulate loading is detected over the alarm set point established according to 40 CFR 60.273a(e)(4), and the alarm must be located such that it can be identified by the appropriate plant personnel. [40 CFR 60.273a(e)(3)]
 - iv. For each bag leak detection system required by 40 CFR 60.273a(e), the permittee shall develop and submit to the Division, for approval, a site-specific monitoring plan that addresses the items identified in 40 CFR 60.273a(e)(4)(i) through (v). For each bag leak detection system that operates based on the triboelectric effect, the monitoring plan shall be consistent with the recommendations contained in EPA-454/R-98-015, Fabric Filter Bag Leak Detection Guidance (incorporated by reference, see 40 CFR 60.17). The permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. The plan shall describe the following: [40 CFR 60.273a(e)(4)]
 - 1) Installation of the bag leak detection system; [40 CFR 60.273a(e)(4)(i)]
 - 2) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established; [40 CFR 60.273a(e)(4)(ii)]
 - 3) Operation of the bag leak detection system including quality assurance procedures; [40 CFR 60.273a(e)(4)(iii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 4) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list; and [40 CFR 60.273a(e)(4)(iv)]
- 5) How the bag leak detection system output shall be recorded and stored. [40 CFR 60.273a(e)(4)(v)]
- v. The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable). [40 CFR 60.273a(e)(5)]
- vi. Following initial adjustment, the permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Division except as provided for in 40 CFR 60.273a(e)(6)(i) and (ii). [40 CFR 60.273a(e)(6)]
 - 1) Once per quarter, the permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects including temperature and humidity according to the procedures identified in the site-specific monitoring plan required under 40 CFR 60.273a(e)(4). [40 CFR 60.273a(e)(6)(i)]
 - 2) If opacities greater than zero percent are observed over four consecutive 15-second observations during the daily opacity observations required under 40 CFR 60.273a(c) and the alarm on the bag leak detection system alarm is not activated, the permittee shall lower the alarm set point on the bag leak detection system to a point where the alarm would have been activated during the period when the opacity observations were made. [40 CFR 60.273a(e)(6)(ii)]
- vii. For negative pressure, induced air baghouses that are discharged to the atmosphere through a stack, the bag leak detection sensor must be installed downstream of the baghouse or upstream of any wet scrubber. [40 CFR 60.273a(e)(7)]
- viii. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. [40 CFR 60.273a(e)(8)]
- b. For each bag leak detection system installed according to 40 CFR 60.273a(e), the permittee shall initiate procedures to determine the cause of all alarms within 1 hour of an alarm. The cause of the alarm must be alleviated within 24 hours of the time the alarm occurred by taking whatever response action(s) are necessary. Response actions may include, but are not limited to, the following: [40 CFR 60.273a(f)]
 - i. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may have caused an increase in particulate emissions; [40 CFR 60.273a(f)(1)]
 - ii. Sealing off defective bags or filter media; [40 CFR 60.273a(f)(2)]
 - iii. Replacing defective bags or filter media or otherwise repairing the control device; [40 CFR 60.273a(f)(3)]
 - iv. Sealing off a defective baghouse compartment; [40 CFR 60.273a(f)(4)]
 - v. Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; [40 CFR 60.273a(f)(5)]
 - vi. Establishing to the extent acceptable by the Division that the alarm was a false alarm and not caused by a bag leak or other malfunction that could reasonably result in excess particulate emissions; and [40 CFR 60.273a(f)(6)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- vii. Shutting down the process producing the particulate emissions. [40 CFR 60.273a(f)(7)]
- c. In approving the site-specific monitoring plan required in 40 CFR 60.273a(e)(4), the Division may allow the permittee more than 24 hours to alleviate specific conditions that cause an alarm if the permittee 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 24 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)]
- d. The permittee shall maintain the following records for each bag leak detection system required under 40 CFR 60.273a(e): [40 CFR 60.276a(h)]
 - i. Records of the bag leak detection system output; [40 CFR 60.276a(h)(1)]
 - ii. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and [40 CFR 60.276a(h)(2)]
 - iii. An identification of the date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, if procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and if the alarm was alleviated within 24 hours of the alarm. [40 CFR 60.276a(h)(3)]
- e. The permittee shall install, operate, and maintain the control device(s) associated with each emission unit according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- f. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 8 – Miscellaneous Processing Operations

Emission Point #	Description	Maximum Capacity	Control Equipment	Construction Commenced
031 (S-31)	Ferro Alloy/ Flux Addition System	8,760,000 tons/yr	Baghouse	11/1/1999
065 (S-65)	Grinding Machine	306,600 tons/yr	Baghouse	3/15/2002
067 (S-67)	Roughing Mill	306,600 tons/yr	Baghouse	3/15/2002
068 (S-68)	Bars Cut-Off Station 1	306,600 tons/yr	Baghouse	3/15/2002

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*, for PM.

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The source is assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions** and when complying with the PM emission limits in **2. Emission Limitations** (c).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall not allow emissions of PM to exceed the limits in the following table:
[401 KAR 51:017]

Emission Point #	PM Limit (lb/hr)
031	1.44
065	0.86
067	0.26
068	0.26

Compliance Demonstration Methods:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- A. The permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month. The monthly average particulate emissions shall be calculated as follows:

$$PE = \left(\frac{PW \times EF^*}{H} \right) \times (1 - CE)$$

Where:

PE = particulate emissions in lb/hr;

PW = process weight in tons/month;

EF = particulate emission factor in lb/ton of process weight;

* The particulate emission factor shall be the number determined from AP-42, MSDS, the most recent Division approved stack test, or Division approved value.

H = total hours of operation in a month; and

CE = Control efficiency

- B. Refer to **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c);
- C. Refer to **Appendix A – CAM Plan**; and
- D. Refer to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
- The monthly and 12-month rolling total process weight;
 - The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per two calendar weeks while the affected facility is operating. If

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

- c. The permittee shall calculate monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitations in **2. Emission Limitations** (c). [401 KAR 52:020, Section 10]
- d. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- e. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total hours of operation.

The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements** (b) and (d), including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

- b. The permittee shall calculate monthly and 12-month rolling emissions of PM to ensure compliance with the emission limitations in **2. Emission Limitations** (a). [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- d. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- e. Refer to **SECTION F** for general recordkeeping requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
 - iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]
- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain the control device(s) associated with each emission proposed according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 9 – Caster Operations

Emission Point #	Description	Maximum Capacity	Fuel	Control Equipment	Construction Commenced
029	2 Tundish Preheaters & 2 Standby Units	3.8 MMBtu/hr, each	Natural Gas	Low NO _x Burner; Caster Baghouse	11/1/1999
030	10 SEN Preheaters & 5 Standby Units	0.16 MMBtu/hr, each	Natural Gas	Low NO _x Burner; Caster Baghouse	11/1/1999
113	2 Tundish Dryers & 1 Standby Unit	2.4 MMBtu/hr, each	Natural Gas	Low NO _x Burner; Caster Baghouse	2/2/2006
032 (S-32)	Continuous Caster with Oxy-Fuel Torch Cutting	165 tons of steel/hr	Natural Gas	Caster Baghouse	11/1/1999

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*, for PM.

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

- a. For Tundish preheaters (EP 029): [401 KAR 51:017]
 - i. No more than two Tundish preheaters shall be operated simultaneously.
 - ii. Natural gas usage shall not exceed 65.3 MMscf/yr based on a 12-month rolling total.
- b. For SEN preheaters (EP 030): [401 KAR 51:017]
 - i. No more than 10 SEN preheaters shall be operated simultaneously.
 - ii. Natural gas usage shall not exceed 13.7 MMscf/yr based on a 12-month rolling total.

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**.

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
- i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$
- Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

- A. For EPs 029, 030, & 113: Compliance with **2. Emission Limitations** (b) is assumed when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions** and when complying with the PM emission limits in **2. Emission Limitations** (c).
 - B. For EP 032: Compliance with **2. Emission Limitations** (b) is assumed when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions** and when complying with the PM emission limits in **2. Emission Limitations** (c) and (d).
- c. The permittee shall not allow combined emissions of PM from EPs 029, 030, 113, and 032 to exceed 1.77 lb/hr. [401 KAR 51:017]
- d. For EP 032, the permittee shall not allow emissions of PM, CO, and NO_x to exceed the following limits, averaged over 3 heats: [401 KAR 51:017]
- i. For PM: 0.95 lb/hr;
 - ii. For CO: 0.5235 lb/hr;
 - iii. For NO_x: 0.6304 lb/hr.

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the emission limits listed above as follows:

- A. Refer to **4. Specific Monitoring Requirements** (a), (c) and (d), and **5. Specific Recordkeeping Requirements** (a), (c) and (d).
 - B. Refer to **Appendix A – CAM Plan**; and
 - C. Refer to **7. Specific Control Equipment Operating Conditions**.
- e. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

The Cabinet determines that the source is in compliance with 401 KAR 63:020 based on the rate of emissions of airborne toxics determined by the Cabinet using information provided in the application and any supplemental information submitted by the source.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total natural gas usage;
 - iii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once per two calendar weeks while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. For EPs 029, 030, 113, and 032, the permittee shall calculate the combined lb/hr emissions of PM each month to ensure compliance with the emission limits in **2. Emission Limitations (c)**. [401 KAR 52,020, Section 10]
- d. For EP 032, the permittee shall calculate monthly emissions of PM, CO, and NO_x to ensure compliance with the emission limits in **2. Emission Limitations (d)**. [401 KAR 52,020, Section 10]
- e. Refer to **Appendix A** for CAM requirements pursuant to 40 CFR 64.
- f. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total process weight;
 - ii. The monthly and 12-month rolling total natural gas usage;
 - iii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. For EPs 029, 030, 113, and 032, the permittee shall maintain records of the combined lb/hr emissions of PM each month to ensure compliance with the emission limits in **2. Emission Limitations** (c). [401 KAR 52,020, Section 10]
- d. For EP 032, the permittee shall maintain records of the monthly emissions of PM, CO, and NO_x to ensure compliance with the emission limitations in **2. Emission Limitations** (d). [401 KAR 52:02, Section 10]
- e. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- f. Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]
- g. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. On and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **SECTION F**. [40 CFR 64.9(a)(1)]
- b. A report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]
 - iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. Refer to **Appendix A** for reporting requirements under 40 CFR 64.
- d. Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain the control device(s) associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 10 – Cooling Towers

Emission Point #	Description	Water Flow Rate to Tower (gal/hr)	Control Equipment	Construction Commenced
041	Miscellaneous Cooling Tower	242,536	Drift Eliminator	11/1/1999
042	Evaporation Cooler/Off Gas	409,510	Drift Eliminator	11/1/1999
046	Spray and Open Machine Cooling System	110,964	Drift Eliminator	11/1/1999
047	Closed Machine Cooling System	99,868	Drift Eliminator	11/1/1999
063	AP Cold #3 Cooling Tower	156,000	Drift Eliminator	3/7/2001
064	Z-Mill #3 Cooling Tower	177,000	Drift Eliminator	3/7/2001
081	Long Products Reheat & Roughing Cooling Tower	300,000	Drift Eliminator	3/15/2002
082	Long Products Rolling & Miscellaneous Cooling Tower	300,000	Drift Eliminator	3/15/2002
093	Z-Mill #4 Cooling Tower	177,000	Drift Eliminator	1/1/2004
094	Z-Mill #5 Cooling Tower	177,000	Drift Eliminator	2/2/2008
100	AP Cold #4 Cooling Tower	177,000	Drift Eliminator	5/1/2007
107	EAF #2 Cooling Tower	500,000	Drift Eliminator	8/1/2005
108	Melt Shop #2 Cooling Tower	177,000	Drift Eliminator	11/1/2007

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

PRECLUDED REGULATIONS:

401 KAR 63:002, Section 2(4)(j), **40 C.F.R. 63.400 to 63.407, Table 1 (Subpart Q)**, *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*

1. Operating Limitations:

The use of chromium based water treatment chemicals in the cooling towers is prohibited.
[To preclude 40 CFR 63, Subpart Q]

Compliance Demonstration Method:

Refer to **5. Specific Recordkeeping Requirements** (c).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once per calendar month while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- b. The permittee shall monitor TDS or conductivity for each cooling tower at a minimum of once per calendar year. [401 KAR 52:020, Section 10]
- c. Refer to **SECTION F** for general monitoring requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The annual recirculating water flow rate;
 - ii. Results of the tested TDS or conductivity for each cooling tower.
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of water treatment chemical purchases, including invoices and other documentation that includes invoices and other documentation that includes date(s) of purchase or shipment, trade name or other information to identify composition of the product, and quantity of the product. [To preclude 40 CFR 63, Subpart Q]
- d. The permittee shall maintain records of maintenance performed on the cooling towers and mist eliminators. [401 KAR 52:020, Section 10]
- e. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain drift eliminators on each of the cooling towers listed above. [401 KAR 51:017]
- b. The permittee shall install, operate, and maintain the control device(s) associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- c. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 11 – Roads & Handling Operations (Fugitive Sources)

Emission Point #	Description	Maximum Capacity	Control Equipment	Construction Commenced
033 (S-33)	Slag Dumping	448,000 tons/yr	3-Sided Enclosure	11/1/1999 Modified: 2015
037	Sludge Disposal	13 tons/hr	None	1/31/2000
038	Scrap Unloading	18.08 tons/hr	None	1/31/2000
048 (S-48)	Paved Roadways	38,807 VMT/yr	None	11/1/1999
117	Outdoor Refractory Brick Dumping	1.265 tons/hr	None	11/1/1999

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 63:010, *Fugitive emissions*

1. Operating Limitations:

- a. The permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
 - i. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations. [401 KAR 63:010, Section 3(1)(c)]
 - iii. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
 - iv. The maintenance of paved roadways in a clean condition; or [4(d)01 KAR 63:010, Section 3(1)(e)]
 - v. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]
- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]
- e. Reasonable precautions for the EP 033 slag dumping building shall include, but not be limited to the following: [401 KAR 51:017]
 - i. The water curtain shall be operational at all times while the bay door is open and the ambient temperature is above freezing.
 - ii. The doors into the slag dumping building shall be kept closed to the extent possible during the slag dumping operation and/or when the water curtain is not in operation due to ambient temperatures.
- f. The permittee shall restrict throughput of Slag Dumping (EP 033) to 448,000 tons of total material (including water) on a 12-month rolling total basis. [401 KAR 51:017]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (a) and **5. Specific Recordkeeping Requirements** (a).

2. Emission Limitations:

- a. The permittee shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]
 - i. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
 - ii. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]
- b. The permittee shall not allow emissions of PM, PM₁₀, and PM_{2.5} to exceed the limits in the following table: [401 KAR 51:017]

Emission Point #	PM Limit (lb/hr)	PM₁₀ Limit (lb/hr)	PM_{2.5} Limit (lb/hr)
033	---	0.665	0.235
037	0.00267	---	---
038	0.0829	---	---
117	0.115	---	---

Compliance Demonstration Method:

- A. For EP 033: Compliance is assumed based on building design and compliance with **1. Operating Limitations.**
- B. Refer to **4. Specific Monitoring Requirements** (a) and (d) and **5. Specific Recordkeeping Requirements** (a) and (d).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. For EPs 033, 037, 038, and 117: The monthly and 12-month rolling total throughput;
 - ii. For EPs 033, 037, 038, and 117: The monthly and 12-month rolling total hours of operation;
 - iii. For EP 048, the annual vehicle miles traveled (VMT).
- b. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- c. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]
- d. For EPs 033, 037, 038, and 117: The permittee shall calculate the lb/hr emissions of PM, PM₁₀, and PM_{2.5} each month to ensure compliance with the emission limits in **2. Emission Limitations (b)**. [401 KAR 52:020, Section 10]
- e. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. For EPs 033, 037, 038, and 117: The monthly and 12-month rolling total throughput;
 - ii. For EPs 033, 037, 038, and 117: The monthly and 12-month rolling total hours of operation;
 - iii. For EP 048, the annual vehicle miles traveled (VMT).
- b. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain a log of the following: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emissions observations conducted daily including the date, time, initials of observer, whether any fugitive dust emissions were observed,
 - ii. Any Reference Method 22 performed and field records identified in Reference Method 22.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Any corrective action taken and the results.
 - d. The permittee shall keep records of the monthly calculated emissions of PM, PM₁₀, and PM_{2.5} to ensure compliance with the emission limits in **2. Emission Limitations (b)**. [401 KAR 52:020, Section 10]
 - e. Refer to **SECTION F** for general recordkeeping requirements.
- 6. Specific Reporting Requirements:**
Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 12 – Direct-Fired Heating Operations

Emission Point #	Description	Maximum Capacity (MMBtu/hr)	Fuel	Control Equipment	Construction Commenced
066 (S-66)	Long Products Reheat Furnace	75	Natural Gas	Low NO _x Burner	3/15/2002
083 (S-83)	2 Heaters	3.1 each	Natural Gas	Low NO _x Burner	3/15/2002

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

401 KAR 59:010, *New process operations*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when combusting natural gas. And complying with the emission limits in **2. Emission Limitations** (c).

- c. The permittee shall not allow emissions of CO, PM, NO_x, and VOC to exceed the limits in the following table: [401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point #	CO Limit*	PM Limit*	NO _x Limit*	VOC Limit*
066	6.18 lb/hr; 27.05 ton/yr	0.56 lb/hr; 2.5 ton/yr	5.625 lb/hr; 24.64 ton/yr	0.40 lb/hr; 1.77 ton/yr
083	0.255 lb/hr; 1.12 ton/yr	0.023 lb/hr; 0.1 ton/yr	0.304 lb/hr; 1.33 ton/yr	0.0167 lb/hr; 0.07 ton/yr

*lb/hr limits are 3-hour averages and ton/yr limits are 12-month rolling totals.

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c).

- d. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

The Cabinet determines that the source is in compliance with 401 KAR 63:020 when burning natural gas.

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total natural gas usage;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack no less frequently than once per calendar month while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall calculate monthly and 12-month rolling emissions of CO, PM, NO_x, and VOC for each emission point to ensure compliance with the emission limitations in **2. Emission Limitations** (c).
- d. Refer to **SECTION F** for general monitoring requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Recordkeeping Requirements:**

- a. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
 - i. The monthly and 12-month rolling total natural gas usage;
 - ii. The monthly and 12-month rolling total hours of operation.
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall keep records of monthly and 12-month rolling emissions of CO, PM, NO_x, and VOC for each emission point to ensure compliance with the emission limitations listed in **2. Emission Limitations (c)**.
- d. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 13 – Existing Emergency Diesel Generators

Emission Point #	Description	Max. Capacity (HP)	Construction Commenced
128	MS Crane Emergency Generator	1500	1/1/2000
129	EAF2 Emergency Pump	210	1/1/2005
130	MS WTP Emergency Pump	205	1/1/2000
131	LPHM WTP Emergency Pump	325	1/1/2003
132	HM Emergency Electric Generator	900	1/1/1997
133	CM Courtyard Emergency Generator North Unit #1	335	1/1/1991
134	CM Courtyard Emergency Generator South Unit #2	890	1/1/1991
135	AP3 Emergency Generator	382	1/1/2003

APPLICABLE REGULATION:

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

1. Operating Limitations:

- a. EPs 128, 132, & 134 do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A, including initial notification requirements. [40 CFR 63.6590(b)(3)(iii)]
- b. The permittee must comply with the emission limitations and other requirements in Table 2c to 40 CFR 63, Subpart ZZZZ which apply. [40 CFR 63.6602]
- c. If the permittee operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 63.6604(b)]
- d. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ that apply at all times. [40 CFR 63.6605(a)]
- e. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)(2)]
- g. The permittee must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
- h. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c to 40 CFR 63, Subpart ZZZZ apply. [40 CFR 63.6625(h)]
- i. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c to 40 CFR 63, Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to 40 CFR 63, Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]
- j. The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2c to 40 CFR 63, Subpart ZZZZ that applies according to methods specified in Table 6 to 40 CFR 63, Subpart ZZZZ. [40 CFR 63.6640(a)]
- k. The permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]

- i. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
 - ii. The permittee may operate the emergency stationary RICE for the purpose specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]
 - 1) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]
 - iii. The permittee may operate the emergency stationary RICE for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3)]
1. For each emergency stationary CI RICE, the permittee must meet the following requirements, except during periods of startup: [40 CFR 63, Subpart ZZZZ, Table 2c(1)]
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63, Subpart ZZZZ, Table 2c(1)(a)]
 - 1) Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Table 2c of 40 CFR 63, Subpart ZZZZ. [40 CFR 63, Subpart ZZZZ, Table 2c, Footnote 2]
 - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; [40 CFR 63, Subpart ZZZZ, Table 2c(1)(b)]
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2c(1)(c)]
 - m. For each emergency stationary CI RICE, during periods of startup, the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63, Subpart ZZZZ, Table 2c(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- n. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c 40 CFR 63, Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Table 2c, Footnote 1]
- o. Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. [40 CFR 63, Subpart ZZZZ, Table 2c, Footnote 3]

2. Emission Limitations:

None

3. Testing Requirements:

Pursuant to 401 KAR 50:045 Section 1, performance testing using the Reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor and collect data according to 40 CFR 63.6635. [40 CFR 63.6635(a)]
- b. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 63.6635(b)]
- c. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. [40 CFR 63.6635(c)]
- d. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee must keep the records described in 40 CFR 63.6655(a)(1) through (5). [40 CFR 63.6655(a)]
 - i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - iii. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
- b. The permittee must keep the records required in Table 6 of 40 CFR 63, Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies. [40 CFR 63.6655(d)]
 - c. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan. [40 CFR 63.6655(e)]
 - d. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]
 - e. The records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a)]
 - f. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6660(b)]
 - g. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(c)]
 - h. The permittee shall keep records of the manufacturer's emission-related written instructions or the developed maintenance plan for each emergency stationary RICE. [401 KAR 52:020, Section 10]
 - i. For EPs 128, 132, & 134, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

j. Refer to **SECTION F** for general recordkeeping requirements.

6. **Specific Reporting Requirements:**

- a. The permittee must report each instance in which the permittee did not meet each emission limitation or operating limitation in Table 2c to 40 CFR 63, Subpart ZZZZ that applies. These instances are deviations from the emission and operating limitations in 40 CFR 63, Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)]
- b. The permittee must report each instance in which the permittee did not meet the requirements in Table 8 to 40 CFR 63, Subpart ZZZZ that apply. [40 CFR 63.6640(e)]
- c. The permittee must submit each report in Table 7 of 40 CFR 63, Subpart ZZZZ that applies. [40 CFR 63.6650(a)]
- d. Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report by the date in Table 7 of 40 CFR 63, Subpart ZZZZ and according to the requirements in 40 CFR 63.6650(b)(1) through (b)(9). [40 CFR 63.6650(b)]
- e. The Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (6). [40 CFR 63.6650(c)]
 - i. Company name and address. [40 CFR 63.6650(c)(1)]
 - ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR 63.6650(c)(2)]
 - iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.6650(c)(3)]
 - iv. If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction. [40 CFR 63.6650(c)(4)]
 - v. If there are no deviations from any emission or operating limitations that apply to the permittee, a statement that there were no deviations from the emission or operating limitations during the reporting period. [40 CFR 63.6650(c)(5)]
- f. For each deviation from an emission or operating limitation that occurs for a stationary RICE where the permittee is not using a CMS to comply with the emission or operating limitations in 40 CFR 63, Subpart ZZZZ, the Compliance report must contain the information in 40 CFR 63.6650(c)(1) through (4) and the information in 40 CFR 63.6650(d)(1) and (2). [40 CFR 63.6650(d)]
 - i. The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [40 CFR 63.6650(d)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR 63.6650(d)(2)]
- g. The permittee must report all deviations as defined in 40 CFR 63, Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of 40 CFR 63, Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in 40 CFR 63, Subpart ZZZZ, submission of the Compliance report must be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report must not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the Division. [40 CFR 63.6650(f)]
- h. If the emergency stationary RICE operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee must submit an annual report according to the requirements in 40 CFR 63.6650(h)(1) through (3). [40 CFR 63.6650(h)]
- i. Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 14 – Emergency Diesel Fire Pumps

Emission Point #	Description	Capacity (HP)	Construction Commenced
136	MS Emergency Fire Pump #1	288	1/1/2007
137	MS Emergency Fire Pump #2	288	1/1/2007

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

1. Operating Limitations:

- a. The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]
- b. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- c. The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]
- d. The permittee must do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and, [40 CFR 60.4211(a)(2)]
 - iii. Meet the requirements of 40 CFR part 1068, as they apply. [40 CFR 60.4211(a)(3)]
- e. The permittee must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII, and must meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]
 - i. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR 60.4211(f)(2)]
 - 1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
- iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]
 - 1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 60.4211(f)(3)(i)(A) through (E) are met. [40 CFR 60.4211(f)(3)(i)]
- f. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance according to 40 CFR 60.4211(g)(2). [40 CFR 60.4211(g)]

Compliance Demonstration Method:

The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

For each fire pump engine with a displacement of less than 30 liters per cylinder, the permittee must comply with the emission standards in Table 4 to 40 CFR 60, Subpart IIII, for all pollutants. [40 CFR 60.4205(c)]

Emission Point #	NMHC + NO_x g/KW-hr (g/HP-hr)	CO g/KW-hr (g/HP-hr)	PM g/KW-hr (g/HP-hr)
136	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
137	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)

Compliance Demonstration Method

The permittee must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (5). [40 CFR 60.4211(b)]

- A. Purchasing an engine certified to emission standards for the same model year and maximum engine power as described in 40 CFR parts 1039 and 1042, as applicable. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(b)(1)]
- B. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR 60, Subpart IIII and these methods must have been followed correctly. [40 CFR 60.4211(b)(2)]
- C. Keeping records of engine manufacturer data indicating compliance with the standards. [40 CFR 60.4211(b)(3)]
- D. Keeping records of control device vendor data indicating compliance with the standards. [40 CFR 60.4211(b)(4)]
- E. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable. [40 CFR 60.4211(b)(5)]

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. If the emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- b. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the hours of operation of each engine. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. If the emergency stationary CI ICE operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)]
- b. Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Group 15 – New Emergency Diesel Generators

Emission Point #	Description	Capacity (HP)	Construction Commenced
138	AP 4#5 Emergency Generator	227	1/1/2008
139	AP 4#4 Emergency Generator	475	1/1/2007
140	Gate 1 Emergency Generator	97	1/1/2008
152	Bright Anneal Emergency Generator	580	1/7/2017
153	HM Water Treatment Emergency Generator	520	1/7/2017
155	Gate #5 Emergency Generator	36	6/15/2020

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

1. Operating Limitations:

- a. For EPs 152 & 153: The permittee does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A except for the initial notification requirements of 40 CFR 63.6645(f). [40 CFR 63.6590(b)(1)(i)]
- b. Except for EPs 152 & 153: The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]
- c. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- d. The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]
- e. The permittee must do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and, [40 CFR 60.4211(a)(2)]
 - iii. Meet the requirements of 40 CFR part 1068, as applicable. [40 CFR 60.4211(a)(3)]
- f. The permittee must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and must meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]

- i. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
- ii. The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4211(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR 60.4211(f)(2)]
 - 1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
- iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)(3)]
 - 1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 60.4211(f)(3)(i)(A) through (E) are met. [40 CFR 60.4211(f)(3)(i)]
- g. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance according to 40 CFR 60.4211(g). [40 CFR 60.4211(g)]

Compliance Demonstration Method:

- A. For each stationary CI internal combustion engine with maximum engine power less than 100 HP, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. [40 CFR 60.4211(g)(1)]

- B. For each stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]
- C. For each stationary CI internal combustion engine greater than 500 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g)(3)]

2. Emission Limitations:

The permittee must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. [40 CFR 60.4205(b)]

Compliance Demonstration Method:

The permittee must comply with the emission standards specified in 40 CFR 60.4205(b) by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

- a. If the emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- b. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- b. The permittee shall keep records of the hours of operation of each engine that are recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [401 KAR 52:020, Section 10]
- c. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. If the emergency stationary CI ICE operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)]
- b. Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP 148 Z-Mill #6 Cold Rolling Mill**

Description: A 54" reverse cold rolling mill.

Construction Commenced: 7/1/2015

Maximum Capacity: 40 tons of steel/hr

Control Equipment: Oil Mist Eliminator (integral)

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

PRECLUDED REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]

- i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
- ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
- iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions** and when complying with the PM emission limits in **2. Emission Limitations** (c).

- c. The permittee shall not allow emissions of PM to exceed 1.5 lb/hr. [To preclude 401 KAR 51:017]
- d. The permittee shall not allow emissions of VOC to exceed 8.0 lb/hr. [To preclude 401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (a) and (c), and **5. Specific Recordkeeping Requirements** (a) and (c).

3. Testing Requirements:

- a. The permittee shall conduct performance tests to demonstrate compliance with **2. Emission Limitations** (c). The testing shall be conducted within 5 years of the most recent Division approved stack test. The permittee shall use the following method:
 - i. U.S. EPA Method 5 for determination of PM emissions from Stationary Sources in 40 CFR 60, Appendix A;
 - ii. An alternative method approved by the Division.
- b. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The total monthly process weight;
 - ii. The total monthly hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week and a Reference Method 9 reading simultaneous with a qualitative visual observation once per calendar quarter while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall calculate PM and VOC emissions monthly to ensure compliance with the emissions limits in **2. Emission Limitations** (c) and (d). [401 KAR 52:020, Section 10]
- d. The permittee shall inspect the oil mist eliminator filters once per calendar quarter to ensure they are in proper working condition. [401 KAR 52:020, Section 10]
- e. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The total monthly process weight;
 - ii. The total monthly hours of operation.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
 - c. The permittee shall keep records of the PM and VOC emissions calculated monthly to ensure compliance with the emissions limits in **2. Emission Limitations (c) and (d)**. [401 KAR 52:020, Section 10]
 - d. The permittee shall keep records of the quarterly inspections of the oil mist eliminator filters to ensure they are in proper working condition. [401 KAR 52:020, Section 10]
 - e. Refer to **SECTION F** for general recordkeeping requirements.
- 6. Specific Reporting Requirements:**
Refer to **SECTION F** for general reporting requirements.
- 7. Specific Control Equipment Operating Conditions:**
- a. The permittee shall install, operate, and maintain the control device associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
 - b. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 154 SI Emergency Fire Pump

Description:

Make, Model: Zenith, NA428

Capacity: 34.5 HP

Fuel: Natural gas

Manufacture Date: 2018

Installation Date: 2/28/2019

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(eeee) 40 C.F.R. 60.4230 to 60.4248, Tables 1 to 4 (Subpart JJJJ), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.*

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.*

1. Operating Limitations:

- a. The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]
- b. The permittee must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- c. The permittee must operate the emergency stationary ICE according to the requirements in 40 CFR 60.4243(d)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4243(d)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4243(d)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart JJJJ and must meet all requirements for non-emergency engines. [40 CFR 60.4243(d)]
 - i. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4243(d)(1)]
 - ii. The permittee may operate the emergency stationary ICE for the purpose specified in 40 CFR 60.4243(d)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4243(d)(2). [40 CFR 60.4243(d)(2)]
 - 1) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4243(d)(2)(i)]

- iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4243(d)(2). Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4243(d)(3)]
 - 1) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 60.4243(d)(3)(i)(A) through (E) are met. [40 CFR 60.4243(d)(3)(i)]
- d. If the permittee purchases a non-certified engine or does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, the permittee is required to perform initial performance testing as directed in 40 CFR 60.4243, but is not required to conduct subsequent performance testing unless the stationary engine is undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of 40 CFR 60.4243(f), perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine. [40 CFR 60.4243(f)]

2. **Emission Limitations:**

- a. The permittee must comply with the emission standards in Table 1 to 40 CFR 60, Subpart JJJJ for the emergency stationary SI ICE. [40 CFR 60.4233(d)]

Emission Point #	NO_x + HC (g/HP-hr)	CO (g/HP-hr)
154	10	387

Compliance Demonstration Method:

The permittee must demonstrate compliance according to one of the methods specified in 40 CFR 60.4243(b)(1) and (2): [40 CFR 60.4243(b)]

- A. Purchasing an engine certified according to procedures specified in 40 CFR 60, Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in 40 CFR 60.4243(a). [40 CFR 60.4243(b)(1)]
- B. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in 40 CFR 60.4233(d) and according to the requirements specified in 40 CFR 60.4244, as applicable, and according to 40 CFR 60.4243(b)(2)(i). [40 CFR 60.4243(b)(2)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance. [40 CFR 60.4243(b)(2)(i)]

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. If the emergency stationary SI internal combustion engine does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter upon startup of the emergency engine. [40 CFR 60.4237(c)]
- b. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the information in 40 CFR 60.4245(a)(1) through (4): [40 CFR 60.4245(a)]
 - i. All notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
 - ii. Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
 - iii. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
 - iv. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]
- b. The permittee shall keep records of the hours of operation of the engine. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [401 KAR 52:020, Section 10]
- c. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

- a. If the emergency stationary SI ICE operates for the purposes specified in 40 CFR 60.4243(d)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 60.4245(e)(1) through (3). [40 CFR 60.4245(e)]
- b. Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP 143 Parts Washers (Cold Cleaners)

Description: A group of cold cleaners located at various locations at the facility. All constructed after June 29, 1979.

Process #	Description	Maximum Solvent Usage (gal/yr)	Solvent Used	Manufacturer
1	HM Down Coiler Maintenance	100	D-Solv	Westward
2	HM Bolt Bin	100	D-Solv	Westward
3	HM H-1 Maintenance	100	D-Solv	Graymill
4	HM Plate	200	D-Solv	Westward
5	Z-Mill 3 Maintenance #1	200	D-Solv	Westward
6	Z-Mill 3 Maintenance #2	200	D-Solv	Westward
7	HM Finishing Mill	200	D-Solv	Graymill
8	AP4 Maintenance	100	D-Solv	Graymill
9	AP3 Furnace Maintenance	42	D-Solv	Graymill
10	LPHM Furnace	400	D-Solv	Graymill
11	LPFM Furnace	400	D-Solv	Graymill
12	CM Crane MTC	400	D-Solv	Graymill
13	LPFM CL 3 & 5	40	D-Solv	Westward
14	LPFM CL 4	40	D-Solv	Westward
15	LMFM Dye #1	40	D-Solv	Westward
16	LPFM CL 1 & 2	40	D-Solv	Westward
17	LMFM Dye #2	10	D-Solv	Graymill
18	LPHM Maintenance	400	D-Solv	Westward

APPLICABLE REGULATIONS:

401 KAR 59:185, *New solvent metal cleaning equipment*

1. Operating Limitations:

- a. Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers. [401 KAR 59:185, Section 4(2)(a)]
- b. The degreaser cover shall be closed if not handling parts in the cleaner. [401 KAR 59:185, Section 4(2)(b)]
- c. Cleaned parts shall be drained for a minimum of fifteen (15) seconds, or until dripping ceases, whichever is longer. [401 KAR 59:185, Section 4(2)(c)]
- d. The flushing of parts with a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. The solvent flow shall be directed downward to avoid turbulence at the air-solvent interface so as to prevent the solvent from splashing outside of the cold cleaner. [401 KAR 59:185, Section 4(2)(d)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- e. Work area fans shall be positioned so that air is not directed across the opening of the cold cleaner. [401 KAR 59:185, Section 4(2)(e)]
- f. The use of an air-agitated solvent bath is prohibited. A pump-agitated solvent bath shall be operated so as to produce no observable splashing of the solvent against either the tank wall or the parts that are being cleaned. [401 KAR 59:185, Section 4(2)(f)]
- g. The cold cleaner shall be free of all liquid leaks. Auxiliary cleaning equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible leaks, tears, or cracks. [401 KAR 59:185, Section 4(2)(g)]
- h. Spills that occur during solvent transfer shall be cleaned immediately. Wipe rags, or other absorbent equipment and materials, used to clean the spill shall be stored in a covered container for disposal unless storage of these items is prohibited by fire protection authorities. [401 KAR 59:185, Section 4(2)(h)]

2. Emission Limitations:

The permittee shall install, maintain and operate the control equipment and observe at all times the operating requirements that apply to this type of degreaser as specified in 401 KAR 59:185, Section 4. [401 KAR 59:185, Section 3]

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Division.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor annual total solvent usage and the type of solvent used. [401 KAR 52:020, Section 10]
- b. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of annual total solvent usage and the type of solvent used. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the MSDS for each solvent used. [401 KAR 52:020, Section 10]
- c. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**7. Specific Control Equipment Operating Conditions:**

- a. The cleaner shall be equipped with a cover. If the solvent volatility is greater than fifteen (15) mm Hg measured at 100°F or if the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with one (1) hand. [401 KAR 59:185, Section 4(1)(a)]
- b. The cleaner shall be equipped with a drainage facility so that solvent that drains off parts removed from the cleaner will return to the cleaner. If the solvent volatility is greater than thirty-two (32) mm Hg measured at 100°F then the drainage facility shall be internal so that parts are enclosed under the cover while draining. The drainage facility may be external if the Cabinet determines that an internal type cannot fit into the cleaning system. [401 KAR 59:185, Section 4(1)(b)]
- c. A permanent, conspicuous label, summarizing the operating requirements specified in 401 KAR 59:185, Section (4)(2) shall be installed on or near the cleaner. [401 KAR 59:185, Section 4(1)(c)]
- d. If used, the solvent spray shall be a fluid stream, not a fine, atomized or shower type spray, and at a pressure that does not cause excessive splashing. [401 KAR 59:185, Section 4(1)(d)]
- e. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point 156 – Brick Crushing

Process ID #	Description	Maximum Capacity	Control Equipment	Construction Commenced
1	Brick Crusher Loading	131,400 ton/yr	Baghouse	6/2022
2	Brick Crushing	131,400 ton/yr	Baghouse	6/2022
3	Crushed Brick Bagging	131,400 ton/yr	Baghouse	6/2022
4	Brick Crusher Caterpillar Diesel Non-Emergency Engine	320 HP	None	6/2022

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

401 KAR 60:005, Section 2(2)(dddd), **40 C.F.R. 60.4200 to 60.4219**, Tables 1 to 8 (Subpart III), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

401 KAR 63:002, Section 2(4)(eeee), **40 C.F.R. 63.6580 to 63.6675**, Tables 1a to 8, and Appendix A (Subpart ZZZZ), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

1. Operating Limitations:

- a. The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart III, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)(1)]
- b. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine. [40 CFR 60.4206]
- c. The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]
- d. The permittee must do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and, [40 CFR 60.4211(a)(2)]
 - iii. Meet the requirements of 40 CFR part 1068, as applicable. [40 CFR 60.4211(a)(3)]
- e. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance according to 40 CFR 60.4211(g)(2). [40 CFR 60.4211(g)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

For each stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements (b)** and **5. Specific Recordkeeping Requirements (b)**.

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

To demonstrate compliance with the particulate matter emission limitations specified in 401 KAR 59:010, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate shall be determined by dividing the tons of material added to each emission unit in a calendar month divided by total hours the unit operated that month. The average particulate emissions shall be calculated as follows:

$$PE = \left(\frac{PW \times EF^*}{H} \right) \times (1 - CE)$$

Where:

PE = particulate emissions in lb/hr;

PW = process weight in tons/month;

EF = particulate emission factor in lb/tons of process weight;

* The particulate emission factor shall be the number determined from AP-42, MSDS, the most recent Division approved stack test, or Division approved value.

H = total hours of operation in a month; and

CE = Control efficiency

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable. [40 CFR 60.4204(b)]

Compliance Demonstration Method:

The permittee must comply with the emission standards specified in 40 CFR 60.4204(b) by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

3. Testing Requirements:

Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following: [401 KAR 52:020, Section 10]
 - i. The monthly process weight;
 - ii. The monthly total hours of operation; and
 - iii. The monthly total fuel usage and hours of operation of the engine.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from associated stacks/vents no less frequently than once per calendar week while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]
- d. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following: [401 KAR 52:020, Section 10]
 - i. The monthly process weight;
 - ii. The monthly total hours of operation; and
 - iii. The monthly total fuel usage and hours of operation of the engine.
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer,

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]

- c. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee must keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]
- d. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain the control device(s) associated with each emission proposed according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- b. The permittee shall install, calibrate at least once per calendar year, and maintain a device for the measurement of pressure drop across the baghouse. The permittee shall monitor the pressure drop for the baghouse once per day except when the associated emission unit is not in operation. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of pressure drop readings monitored for the baghouse and calibration records for the monitoring device. [401 KAR 52:020, Section 10]
- d. Refer to **SECTION E**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EP 157 Reverse Cold Rolling Mill #7**

Description: A 1350 mm reverse cold rolling mill.

Construction Commenced: 2023

Maximum Capacity: 40 tons of steel/hr

Control Equipment: Oil Mist Eliminator (integral)

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

1. Operating Limitations:

None

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** (b) and **5. Specific Recordkeeping Requirements** (b).

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates up to 0.5 ton/hr: $E = 2.34$
 - ii. For process weight rates up to 30 ton/hr: $E = 3.59P^{0.62}$
 - iii. For process weight more than 30 ton/hr: $E = 17.31P^{0.16}$

Where: E is the rate of emission in lb/hr and P is the process weight rate in tons/hr.

Compliance Demonstration Method:

The emission points listed above are assumed to be in compliance with **2. Emission Limitations** (b) when the associated control equipment is operated at all times during the operation of the associated emission point according to **7. Specific Control Equipment Operating Conditions**.

3. Testing Requirements:

- a. Performance testing shall be conducted in accordance with 401 KAR 50:055, General compliance requirements and permit SECTION G – GENERAL PROVISIONS. The permittee shall conduct the testing within sixty (60) days after achieving the maximum production rate at which EP 157 will be operated, but not later than 180 days after initial start-up. The permittee shall use the following methods to verify PM, PM₁₀, PM_{2.5}, and VOC emission factors:
 - i. U.S. EPA Method 201A and 202 for determination of PM, PM₁₀, and PM_{2.5} emissions from Stationary Sources in 40 CFR 60, Appendix A;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. U.S. EPA Method 25A for determination of VOC emissions from Stationary Sources in 40 CFR 60, Appendix A;
 - iii. An alternative method approved by the Division.
- b. Pursuant to 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The total monthly process weight;
 - ii. The total monthly hours of operation.
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack once per calendar week and a Reference Method 9 reading simultaneous with a qualitative visual observation once per calendar quarter while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), then the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- c. The permittee shall inspect the oil mist eliminator filters once per calendar quarter to ensure they are in proper working condition. [401 KAR 52:020, Section 10]
- d. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The total monthly process weight;
 - ii. The total monthly hours of operation.
- b. The permittee shall retain records of the qualitative visual observations required by **4. Specific Monitoring Requirements (b)**, including the date, time, initials of observer, whether any emissions were observed (yes/no), any Method 9 readings taken, and any corrective action taken including results due to observed emissions. [401 KAR 52:020, Section 10]
- c. The permittee shall keep records of the quarterly inspections of the oil mist eliminator filters to ensure they are in proper working condition. [401 KAR 52:020, Section 10]
- d. Refer to **SECTION F** for general recordkeeping requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install, operate, and maintain the control device associated with each emission point according to the manufacturer's specifications and during all times that the associated emission point is operating. [401 KAR 52:020, Section 10]
- b. Refer to **SECTION E**.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. T-01: 1 Hydrofluoric acid (70%) storage tanks	None
2. T-02: 1 Nitric acid (68%) storage tanks	None
3. T-03: 1 Sodium hydroxide (25%) storage tank	None
4. T-05: 1 Diesel storage tank	None
5. T-06: Waste water lime Day #1	None
6. T-07: Waste water lime Day #2	None
7. C-01: AP lines cooling tower	401 KAR 59:010
8. C-02: Z-Mill #1 cooling tower	401 KAR 59:010
9. W-01: Scale pit water treatment	None
10. C-03: Z-Mill #2 cooling tower	401 KAR 59:010
11. V-01 to V-09: Fugitive emissions from welders, and an alkali scrubber	401 KAR 63:010
12. EP 27: Shot Blaster for Plate Line	401 KAR 59:010
13. EP 72 & 73: Sulfuric Acid Pickling Lines 1 & 2	401 KAR 59:010
14. EP 91: Billet Caster with Shear	None
15. EP 02: Shot Blaster	401 KAR 59:010
16. EP 77: Angle Shot Blaster	401 KAR 59:010
17. EP 111: AP#4 Shot Blaster	401 KAR 59:010
18. EP 109: Stir Station #2-LMF	401 KAR 59:010
19. EP 115: Lime Silo	401 KAR 59:010

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u>	<u>Generally Applicable Regulation</u>
20. EP 118: Shot Blaster (LP)	401 KAR 59:010
21. EP 119: Lime Silo	401 KAR 59:010
22. EP 120: Salt coating tank	401 KAR 59:010
23. EP 161: Slab Grinder	401 KAR 59:010
24. EP 122: Unpaved Haul-Road to Land Improvement Construction Site	401 KAR 63:010
25. EP 123: Aggregate Unloading -Road to Land Improvement Construction Site	401 KAR 63:010
26. EP 124: Barge Unloading Operation	401 KAR 63:010
27. EP 125: Alloy Handling	401 KAR 63:010
28. EP 126: Slag Building Steam Condenser	401 KAR 59:010
29. EP 144: 8 Diesel Tanks	None
30. EP 145: 3 Nitric Acid Storage Tanks, WWTP#2	None
31. EP 146: 3 Hydrofluoric Acid Storage Tanks, WWTP#1	None
32. EP 147: 3 Hydrofluoric Acid Storage Tanks, WWTP#2	None
33. EP 149: Bright Anneal Furnace	None
34. EP 127: 3 Gasoline Tanks (MS, LP, Gate 1)	None
35. EP 158: AP2 Shot Blaster	401 KAR 59:010
36. EP 159: Long Products Shot Blaster	401 KAR 59:010
37. EP 160: Skin Pass Mill	401 KAR 59:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. NO_x, PM, PM₁₀, PM_{2.5}, Lead, VOC, CO, and opacity emissions, as measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
 - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made with 24 hours of the occurrence.
 - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
 - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- d. The method used for determining the compliance status for the source, currently and over the reporting period.
- e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Drive,
Suite 110
Florence, KY 41042

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St. SW
Atlanta, GA 30303-8960

- 10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - 1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - 2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - 3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - 4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].
- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b.].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].
- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - 1) Applicable requirements that are included and specifically identified in the permit; and
 - 2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission point 143 (Process #s 10-18), emission point 156, emission point 157 (Reverse Cold Rolling Mill #7), emission point 158 (AP2 Shot Blaster), emission point 159 (Long Products Shot Blaster), emission point 160 (Skin Pass Mill), and Emission Group 16: Slag Processing (in Section H) in accordance with the terms and conditions of permit V-23-003 R1.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

SECTION G - GENERAL PROVISIONS (CONTINUED)

- 1) An emergency occurred and the permittee can identify the cause of the emergency;
 - 2) The permitted facility was at the time being properly operated;
 - 3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - 4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - 5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- 1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - 2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - 3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - 4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
 - 5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
 - 6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP*eSubmit software.
- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

The alternate operating scenarios set forth below have been approved by the Division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

ALTERNATE OPERATING SCENARIO 1

The following operating scenario authorizes the operation of the emission group below when Metal Services LLC (AI #117650) is not able to process NAS's slag at their Ghent facility. Since it is possible that some slag may accumulate, it may be necessary for both operations to occur simultaneously to prevent a large backlog. NAS will not be importing slag from any other facility. The slag pots are dumped in the slag barn (EP #033) where the slag is quenched inside the slag building. The slag movement and quenching of the slag in the slag barn is consistently managed by Metal Services LLC. The purpose of the quenching is to quickly reduce the temperature of the slag so that it can be more quickly processed as well as improve the processing of the slag.

Emission Group 16 – Slag Processing

EP #	Description	Maximum Capacity	Control Equipment	Construction Commenced
ST1	Screening Operation: consists of Loader Feeding into Screen Hopper, Screen, Screen Output to Ground, Screen Output to Conveyor to Truck, 111 HP Diesel Engine	562,300 ton/yr	Moisture (Saturated*)	8/2022
ST2	Crushing Operation: consists of Load Feeding into Crusher, Crusher, 275 HP diesel Engine	562,300 ton/yr	Moisture (Saturated)	8/2022
ST3	Barge Loading Operation: consist of Truck Dumping to Pile, Loader Feeding onto Conveyor, Transfer Conveyor to Barge, 60 HP Diesel Engine	562,300 ton/yr	Moisture (Saturated)	8/2022

* Saturated: Moist slag processed outdoors.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (Subpart IIII), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (Subpart ZZZZ), National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

- a. The permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
 - i. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]
 - ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations. [401 KAR 63:010, Section 3(1)(c)]
 - iii. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
 - iv. The maintenance of paved roadways in a clean condition; or [4(d)01 KAR 63:010, Section 3(1)(e)]
 - v. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]
- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]
- c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]
- e. The permittee must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)(7)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- f. The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 over the entire life of the engine. [40 CFR 60.4206]
- g. The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]
- h. The permittee must do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and, [40 CFR 60.4211(a)(2)]
 - iii. Meet the requirements of 40 CFR part 1068, as applicable. [40 CFR 60.4211(a)(3)]
- i. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance according to 40 CFR 60.4211(g). [40 CFR 60.4211(g)]

Compliance Demonstration Method:

- A. For each stationary CI internal combustion engine with maximum engine power less than 100 HP, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. [40 CFR 60.4211(g)(1)]
- B. For each stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

2. Emission Limitations:

- a. The permittee shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]
 - i. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
 - ii. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]
- b. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

The Cabinet determines that the source is in compliance with 401 KAR 63:020 based on the rate of emissions of airborne toxics determined by the Cabinet using information provided in the application and any supplemental information submitted by the source as well as the process of using only wet and saturated slag.

- c. The permittee must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable. [40 CFR 60.4204(b)]

Compliance Demonstration Method:

The permittee must comply with the emission standards specified in 40 CFR 60.4204(b) by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

3. Testing Requirements:

Pursuant to 401 KAR 50:045, Section 1, performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly process weight;
 - ii. The monthly total hours of operation; and
 - iii. The monthly total fuel usage and hours of operation of the engines.
- b. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- c. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

- d. If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]
- e. Refer to **SECTION F** for general monitoring requirements.

5. Specific Recordkeeping Requirements:

- a. The permittee shall keep records of the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly process weight;
 - ii. The monthly total hours of operation; and
 - iii. The monthly total fuel usage and hours of operation of the engines.
- b. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain a log of the following: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emissions observations conducted daily including the date, time, initials of observer, whether any fugitive dust emissions were observed,
 - ii. Any Reference Method 22 performed and field records identified in Reference Method 22.
 - iii. Any corrective action taken and the results.
- d. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee must keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]
- e. Refer to **SECTION F** for general recordkeeping requirements.

6. Specific Reporting Requirements:

Refer to **SECTION F** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

Refer to **SECTION E**.

SECTION I - COMPLIANCE SCHEDULE

None

APPENDIX A

Compliance Assurance Monitoring Plan (CAM Plan)

Compliance Assurance Monitoring for EP 003 (AP1), EP 007 (AP2), EP 062 (AP3), and EP 101 (AP4) – Acid Pickling Lines

I. Applicability

The emissions from process tanks, and recirculation tanks for the Annealing and Pickling (AP) Lines 1, 2, 3, and 4 are evacuated to wet scrubbers and selective catalyst reduction units (SCRs). The SCRs control nitrogen oxide emissions from the pickling lines. AP1 and AP2 share the same scrubber and SCR. AP3 and AP4 have separate control equipment. Applicable regulation: 401 KAR 51:017

Emission limits: NOx limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of AP1, AP2, AP3, and AP4 for compliance assurance is accomplished by:

- i. Monitoring NOx emissions from the SCR;
- ii. Monitoring combustion chamber temperature of SCR; and
- iii. Monitoring ammonia flow rate of SCR.

III. Rational for Selection of Performance Indicators

- i. NOx monitoring is selected as performance indicator as the NOx analyzer provides feedback and controls of the SCR when ran in automatic mode.
- ii. Combustion chamber temperature is selected as performance indicator as the combustion chamber temperature assures that the gas stream is at sufficient temperature to initiate the reduction of NOx.
- iii. Ammonia flow rate is selected as indicator since ammonia is essential to convert NO₂ to N₂ and water. Insufficient quantities will minimize the reduction of NO₂.

Item	Indicator 1 NOx emission rate	Indicator 2 Combustion chamber temperature of SCR	Indicator 3 Ammonia flow rate
MONITORING APPROACH			
Measurement Approach	NOx concentration (ppm) in exist gas stream using NOx monitor (infra red, chemiluminescent or equivalent) ⁽¹⁾	Combustion chamber temperature of SCR using thermocouples	Ammonia flow meter used to continuously monitor ammonia flow rate
Indicator Range	An excursion is when the 24-hour average NOx concentration exceeds the respective concentrations. AP1 & AP2: 50 ppm; AP3: 100 ppm; AP4: 50 ppm. ⁽²⁾	When the NOx analyzer is not in operation, an excursion will occur when the average combustion chamber temperature falls below 300 °C at AP1 & AP2 and 600 °F at AP3 & AP4. ⁽³⁾	When the NOx analyzer is not in operation, an excursion will occur when the ammonia flow rate falls outside of the following ranges: 100-600 liters/hour at AP1 & AP2; 12-70 gal/hr at AP3; and 100-170 gal/hr at AP4. ⁽³⁾
PERFORMANCE CRITERIA			
Data Representativeness	Calibrated accuracy ±10% (manufacturer's specifications)	Accuracy is ±5 °F	NA

Item	Indicator 1 NOx emission rate	Indicator 2 Combustion chamber temperature of SCR	Indicator 3 Ammonia flow rate
Verification of Operational Status	NA	NA	Indication of NOx reduction or of high NH ₃ feed
QA/QC Practices and Criteria	Sensor checked and calibrated at least once per calendar month.	Calibrate, maintain, and operate instrumentation based on manufacturer recommendations. Thermocouples to be tested annually (once per calendar year).	Calibrate, maintain, and operate instrumentation based on manufacturer recommendation.
Monitoring Frequency	The NOx concentration is continuously displayed.	Continuously	Continuously
Data Collection Procedure	Hourly averages are recorded. If NOx monitor is not working correctly, the chamber temperature and ammonia flow will be recorded once per hour.	Record manually once per shift (under normal operating conditions). If NOx analyzer is not operating properly, the chamber temperature is manually recorded once per hour by operator.	Record manually once per shift (under normal operation). If NOx analyzer is not operating properly, the flow rate is manually recorded once per hour by operator.
Averaging Period	Hourly	N/A	N/A
Recordkeeping	Maintain Records for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number of exceedances (24-hour average), cause of excursion, and corrective action taken	Number of exceedances (24- hour average), cause of excursion, and corrective action taken	Number of exceedances (24- hour average), cause of excursion, and corrective action taken

- (1) NOx monitor is not a CEMS as it does not meet the requirements of CEMS. However, it is an indicator system that can determine the proper operation of the control system.
- (2) 24-hr average NOx concentration will be calculated when there is an individual hourly exceedance of the limit.
- (3) Or the most recent established ranges during which compliance was demonstrated.

Compliance Assurance Monitoring for EPs 004, 099, 005, 011, 060, 092, 095, and 148 – Coil Polishing & Z-Mills

I. Applicability

The emissions from Coil Polishing lines and Z-Mills are controlled by oil mist eliminators to capture PM and oil droplets.

Applicable regulation: 401 KAR 51:017; 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of Coil Polishing Lines and Z-Mills for compliance assurance is accomplished by:

- i. Qualitative opacity observations;
- ii. Inspection of control equipment; and
- iii. Monitoring of pressure drop.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Inspection of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no apparent clogging on the filters.
- iii. Pressure drop is selected as a performance indicator as it demonstrates whether or not there is an issue with the oil filters indicating either a clog or bypass which prevents the proper flow of air through the filters to remove the particulate.

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of mist collector	Indicator 2 Pressure drop
MONITORING APPROACH			
Measurement Approach	Visual opacity	Inspection of control equipment	Pressure drop
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as failure to conduct inspection of equipment.	An excursion is defined as any pressure drop reading not within the range specified.
PERFORMANCE CRITERIA			
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once per calendar week when the unit is in operation. If emissions are visible, Reference Method 9 will be conducted.	Inspection of the control equipment will be conducted to make sure that air pollution control is working properly.	Specified range for pressure drop across unit when line is in operation: Coil Polishing 1: 0.2 – 5 inches of water Coil Polishing 2: 0.2 – 2 inches of water Z-Mill 1: 0.8 – 2.5 inches of water Z-Mill 2: 0.8 – 2.5 inches of water Z-Mill 3: 1 – 15 inches of water Z-Mill 4: 1 – 15 inches of water Z-Mill 5: 1 – 15 inches of water Z-Mill 6: 1 – 15 inches of water

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of mist collector	Indicator 2 Pressure drop
Verification of Operational Status	Certified Reference Method 9 observer for Reference Method 9.	N/A	Reading will be verified once per calendar month.
QA/QC Practices and Criteria	A quarterly Reference Method 9 reading by certified visible emissions observer will be performed, simultaneous with the qualitative observation to quantify the visible emissions once per calendar quarter.	N/A	NA
Monitoring Frequency	Weekly	Monthly	Monthly
Data Collection Procedure	Record the weekly visual observations and quarterly Reference Method 9.	Record that the control equipment is in proper working condition and any maintenance performed.	Manually (when unit is in operation)
Averaging Period	N/A	N/A	N/A
Recordkeeping	Maintain manual records for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

Compliance Assurance Monitoring for Capture and Controls at EP 008 – Lime Silos

I. Applicability

The emissions from the lime silos pass through a bin vent equipped with filters.

Applicable regulation: 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the lime silo for compliance assurance is accomplished by:

- i. Qualitative opacity observations; and
- ii. Inspection of control equipment.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Inspection of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no apparent clogging on the filters.

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of fabric filter
MONITORING APPROACH		
Measurement Approach	Visual opacity	Inspection of control equipment
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as failure to conduct inspection of equipment.
PERFORMANCE CRITERIA		
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once per calendar week when the unit is in operation. If emissions are visible, Reference Method 9 will be conducted.	NA
Verification of Operational Status	Certified Reference Method 9 observer for Reference Method 9	NA
QA/QC Practices and Criteria	NA	NA
Monitoring Frequency	Weekly	Monthly
Data Collection Procedure	Record the weekly visual observations and any Reference Method 9	Record filters are in proper working condition and any maintenance performed.
Averaging Period	N/A	N/A
Recordkeeping	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

Compliance Assurance Monitoring for EPs 024 and 025 – Roughing & Finishing Mills

I. Applicability

The Roughing and Finishing lines are controlled by wet dust collection systems to capture PM.

Applicable regulation: 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the Roughing and Finishing lines for compliance assurance is accomplished by:

- i. Qualitative opacity observations; and
- ii. Inspections of the dust collection systems.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Inspections of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no clogging in the dust collection systems.

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of dust collection systems
MONITORING APPROACH		
Measurement Approach	Visual opacity	Inspection of control equipment
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as failure to conduct inspection of equipment.
PERFORMANCE CRITERIA		
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once per calendar week when the unit is in operation. If emissions are visible, Reference Method 9 will be conducted.	Inspection is to include recirculation pumps, exhaust fan motor amps at the switchgear and is to be performed once per calendar month.
Verification of Operational Status	Certified Reference Method 9 observer for Reference Method 9	NA
QA/QC Practices and Criteria	A quarterly Reference Method 9 reading by certified visible emissions observer will be performed simultaneous with the qualitative observation, to quantify the visible emissions once per calendar quarter.	NA
Monitoring Frequency	Weekly	Monthly
Data Collection	Record the method of inspection (QV or	Record that the control system is in proper

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of dust collection systems
Procedure	Reference Method 9) and observations	working condition and note of any maintenance performed
Averaging Period	N/A	N/A
Recordkeeping	Maintain records for 5 years	Maintain record for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

Compliance Assurance Monitoring for EP 022 – Slab grinder

I. Applicability

The emissions from the Slab Grinder pass through the baghouse equipped with filters.

Applicable regulation: 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the Slab Grinder for compliance assurance is accomplished by:

- i. Qualitative opacity observations; and
- ii. Inspection of baghouse.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Inspection of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no apparent clogging, leaks, or breaks in the baghouse filters.

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of baghouse
MONITORING APPROACH		
Measurement Approach	Visual opacity	Inspection of control equipment
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as failure to conduct inspection of equipment.
PERFORMANCE CRITERIA		
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once per calendar week when the unit is in operation. If emissions are visible, Reference Method 9 will be conducted.	Inspection is to include: bag filters and door seals, absence of leakage between pulses into bag filters and is to be performed once per calendar month.
Verification of Operational Status	Certified Reference Method 9 observer for Reference Method 9	NA
QA/QC Practices and Criteria	A quarterly Reference Method 9 reading by certified visible emissions observer will be performed simultaneous with the qualitative observation, to quantify the visible emissions once per calendar quarter.	NA
Monitoring Frequency	Weekly	Monthly
Data Collection Procedure	Record the method of inspection (QV or Reference Method 9) and observations	Record that the baghouse system is in proper working condition and any maintenance done

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of baghouse
Averaging	NA	NA
Recordkeeping	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

Note: If the emissions are in excess of the opacity limit, unit will be shut down for repair.

Compliance Assurance Monitoring for EP 028 – Plate Pickling

I. Applicability

The emissions from the Plate Pickling line and tanks are controlled by a wet scrubber.

Applicable regulation: 401 KAR 51:017

Emission limits: NOx limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the Plate Pickling for compliance assurance is accomplished by:

- i. Monitoring of NOx emissions;
- ii. Inspections of the pH probe; and
- iii. Recording and monitoring of the pressure drop.

III. Rational for Selection of Performance Indicators

- i. NOx Monitoring is selected as performance indicator as it provides measures the effectiveness of the control. The NOx monitor provides constant feedback to the control device.
- ii. pH of the scrubbing liquid is monitored to ensure that acid is adequately adjusted.
- iii. Pressure drop is recorded to determine if there is an issue with the scrubber media indicating an issue of the air passing through the scrubber media.

Item	Indicator 1 NOx emission rate	Indicator 2 pH of scrubbing liquid	Indicator 3 Pressure drop across scrubber
MONITORING APPROACH			
Measurement Approach	NOx concentration (ppm) in exit gas stream using NOx monitor (infra red, chemiluminescent or equivalent) ⁽¹⁾	pH of scrubbing liquid using a pH probe	Pressure drop using manometer
Indicator Range	An excursion is defined as when the average daily NOx concentration (ppm) exceeds the concentration limit of 100 ppm.	An excursion is defined as failure to record pH and operate outside the pH range of 9 – 11. ⁽²⁾	An excursion is defined as failure to record pressure drop and operate outside pressure drop range of 200 Pa – 600 Pa. ⁽²⁾
PERFORMANCE CRITERIA			
Data Representativeness	Calibrated accuracy $\pm 10\%$	NA.	NA
Verification of Operational Status	Operation of NOx monitor is verified when operating Plate Pickling emission unit.	Operation is checked once per shift. If pH monitor fails, the probe will be replaced and recalibrated. If pH range is outside of 9 – 11, emission unit will be shut down.	When pressure drop across scrubber is outside range of 200 – 600 Pa, emission unit will be shut down.
QA/QC Practices and Criteria	Calibrated at least once per calendar month.	The accuracy of probe is verified at least once per quarter.	Pressure drop gauge will be verified/calibrated once per calendar year.

Item	Indicator 1 NOx emission rate	Indicator 2 pH of scrubbing liquid	Indicator 3 Pressure drop across scrubber
Monitoring Frequency	The NOx concentration is continuously displayed and hourly averages are electronically recorded. If NOx analyzer fails, pH of scrubber liquid and pressure drop will be manually recorded hourly.	Once per shift if NOx monitor is operational, otherwise once per hour until NOx concentrations are being recorded.	Once per shift if NOx monitor is operational, otherwise once per hour until NOx concentrations are able to be recorded.
Data Collection Procedure	Hourly average concentrations are recorded electronically.	Data are electronically trended. Data are recorded manually recorded once per shift unless NOx analyzer fails and then recorded hourly.	Data are electronically trended. Data are recorded manually recorded once per shift unless NOx analyzer fails and then pressure drop is recorded hourly.
Averaging	Hourly	NA	NA
Recordkeeping	Maintain records for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

- (1) NOx monitor is not a CEMS as it does not meet the requirements of CEMS. However, it is an indicator system that can determine the proper operation of the control device.
- (2) Or the most recent established ranges during which compliance was demonstrated.

Compliance Assurance Monitoring for EPs 057, 058, 105, and 106 – EAFs/AODs

I. Applicability

Each EAF and AOD is equipped with its separate baghouse. The emissions of the EAFs include those from charging, melting and tapping. The control equipment is a direct evacuation system consisting of ductwork that draws the emission from the furnace to the baghouse. Each furnace is equipped with doghouse vent and overhead canopy hood vented to its respective baghouse. AOD1 has a canopy to capture miscellaneous emissions and AOD2 is equipped with much larger baghouse designed to control emissions from other MS operations.

Applicable regulations: 401 KAR 51:017; 401 KAR 59:010; 40 CFR 63, Subpart YYYYYY

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the EAFs/AODs for compliance assurance is accomplished by:

- i. Bag leak detection system;
- ii. Pressure differential;
- iii. Visual opacity; and
- iv. Inspection of control equipment.

III. Rational for Selection of Performance Indicators

- i. A bag leak detection system is selected as a performance indicators because it is a good indicator of proper operation and maintenance of the baghouses. When the baghouses are operating optimally, there will be no broke bags. If the bag leak detector alarms, then there is typically an issue with a broken bag.
- ii. Pressure differential is a good indicator as it demonstrates whether or not there is an issue with the bags indicating either a clog or bypass which prevents the proper flow of air through the filters to remove the particulate
- iii. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions.
- iv. Inspection of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no apparent clogging, leaks, or breaks in the baghouse filters.

Item	Indicator 1 Bag Leak Detection	Indicator 2 Pressure Differential	Indicator 3 Visual opacity	Indicator 4 Control Equipment Inspection
MONITORING APPROACH				
Measurement Approach	Broken bags will be monitored using the detector.	Pressure differentials across baghouse will be checked daily to ensure that unit is working effectively.	Visual Opacity	Conduct monthly inspection as per work orders

Item	Indicator 1 Bag Leak Detection	Indicator 2 Pressure Differential	Indicator 3 Visual opacity	Indicator 4 Control Equipment Inspection
Indicator Range	An excursion is defined as failure to respond to alarm. The alarm indicates the presence of emissions greater than the broken bag detectors' limits. Each alarm triggers an inspection, corrective action and recording of event.	Pressure differentials must be maintained within the specified ranges except when compartment is closed for cleaning. An excursion occurs when a pressure drop differential is recorded outside of these limits*. EAF1 Baghouse: 6-32 mbar EAF2 Baghouse: 5-31mbar AOD1 Baghouse: 8-30 mbar AOD2 Baghouse: 13-27 mbar (2 fans) or 13-31 mbar (3 fans)	An excursion is defined as any opacity equal to or greater their respective limits for both MS building (6% opacity), stacks (3% opacity), and dust handling equipment (10% opacity).	An excursion is defined as observation of visible emissions in excess of the limits.
PERFORMANCE CRITERIA				
Data Representativeness	Log of alarms and corrective actions will be maintained.	Pressure differential will be reported once per day.	Reference Method 9 will be conducted when the units are in operation.	Monthly inspections will include baghouses and key control equipment (damper actuators, pressure sensors, housing, conveying system and duct work).
Verification of Operational Status	Records of the alarms will be completed by baghouse operators.	Readings will be checked by baghouse operators.	Any visible emissions from the baghouse or MS building are an indication that there may be potential fan problems or bag failure. The respective baghouse(s) will be inspected to determine the cause.	NA
QA/QC Practices and Criteria	NA	Gauge is verified/calibrated annually	Certified Reference Method 9 observer	Qualified maintenance personnel
Monitoring Frequency	Continuous	Daily when operating	Daily when units are operating	Monthly
Data Collection Procedure	Record of the alarms will be forwarded to NAS's Environmental Dept.	Electronic record of pressure differential readings will be made once per day.	Record the daily readings	Manual records of any maintenance
Averaging	NA	NA	NA	NA
Recordkeeping	Maintain record for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause for the alarm, and corrective action taken	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

*Pressure differential have been verified during compliance stack testing demonstrating that the emission limits are being reached while operating in those ranges. Stack testing may be used to expand these ranges.

Compliance Assurance Monitoring for EP 032 – Slab Caster

I. Applicability

The torch cutter of the slab caster is equipped with a baghouse to control PM.

Applicable regulation: 401 KAR 51:017; 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the torch cutter for compliance assurance is accomplished by:

- i. Qualitative opacity observations; and
- ii. Inspections of the dust collection systems.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Pressure drop is a good indicator as it demonstrates whether or not there is an issue with the bags indicating either a clog or bypass which prevents the proper flow of air through the filters to remove the particulate.

Item	Indicator 1 Visual opacity	Indicator 2 Pressure drop
MONITORING APPROACH		
Measurement Approach	Visual opacity	Pressure drop
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as any pressure drop reading not within the range of 5-20 inches of water except when compartments are being cleaned.
PERFORMANCE CRITERIA		
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once per two calendar weeks when the unit is in operation. If emissions are visible, Reference Method 9 will be conducted.	Measure pressure drop across unit when line is in operation
Verification of Operational Status	Certified Reference Method 9 observer for Reference Method 9	Reading will be verified daily
QA/QC Practices and Criteria	NA	NA
Monitoring Frequency	Once every two calendar weeks	Daily
Data Collection Procedure	Record the visual observations and any Reference Method 9	Manually (when unit is in operation)
Averaging	NA	NA

Item	Indicator 1 Visual opacity	Indicator 2 Pressure drop
Recordkeeping	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

Compliance Assurance Monitoring for EP 031 – Ferro Alloy Flux Addition System

I. Applicability

The ferroalloy system is equipped with a baghouse to control PM.

Applicable regulation: 401 KAR 51:017; 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the Ferro Alloy/Flux Addition lines for compliance assurance is accomplished by:

- i. Qualitative opacity observations; and
- ii. Inspections of the dust collection systems.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Inspections of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no clogging in the dust collection systems.

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of baghouse
MONITORING APPROACH		
Measurement Approach	Visual opacity	Inspection of control equipment
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as visible emissions equal to or greater than 20%.
PERFORMANCE CRITERIA		
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once per two calendar weeks when the unit is in operation. If emissions are visible Reference Method 9 will be conducted.	Inspection is to verify cleaning cycle, and rotary feeder under baghouse.
Verification of Operational Status	Certified Reference Method 9 observer for Method 9	NA
QA/QC Practices and Criteria	NA	NA
Monitoring Frequency	Once every two calendar weeks	Once per shift
Data Collection Procedure	Record the visual observations and any Reference Method 9	Record that the baghouse system is in proper working condition
Averaging	NA	NA

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of baghouse
Recordkeeping	Maintain records for 5 years	Maintain records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

Compliance Assurance Monitoring for EPs 074 and 078 – LP Coil and Angle Pickling

I. Applicability

The emissions from process tanks, and recirculation tanks of the coil and angle pickling lines are evacuated to wet scrubbers. These are two separate lines with separate controls.

Applicable regulation: 401 KAR 51:017

Emission limits: NO_x limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of the Coil and Angle Pickling lines for compliance assurance is accomplished by:

- i. Monitoring of No_x emissions;
- ii. Inspections of the pH probe; and
- iii. Recording and monitoring of the scrubber pressure.

III. Rational for Selection of Performance Indicators

- i. No_x Monitoring is selected as performance indicator as it provides measures the effectiveness of the control. The No_x monitor provides constant feedback to the control device.
- ii. pH of the scrubbing liquid is monitored to ensure that acid is adequately being removed.
- iii. Pressure drop is recorded to determine if there is an issue with the scrubber media indicating an issue with the air passing through the scrubber media.

Item	Indicator 1 No _x emission rate	Indicator 2 pH of scrubbing liquid	Indicator 3 Scrubber Pressure
MONITORING APPROACH			
Measurement Approach	No _x concentration (ppm) in exist gas stream using No _x monitor (infra red, chemiluminescent or equivalent). ⁽¹⁾	pH of scrubbing liquid using a pH probe	Scrubber Pressure
Indicator Range	An excursion is defined as when the average 24-hr No _x concentration (ppm) exceeds the concentration limit of 100 ppm for coil pickling and 75 ppm for angle pickling.	An excursion is defined as failure to record pH and operate outside the pH range of 5-11. ⁽²⁾	An excursion is defined as failure to record pressure and to operate the back pressure of scrubber outside the limits of 0-8 inches of water. ⁽²⁾
PERFORMANCE CRITERIA			
Data Representativeness	Calibrated accuracy ±10%	NA	NA
Verification of Operational Status	Operation of No _x monitor is verified when operating pickling emission unit.	Operation is checked once per shift. If pH monitor fails, the probe will be replaced and recalibrated. If pH range is outside of 5-11, emission unit will be shut down.	NA
QA/QC Practices and Criteria	Calibrated at least monthly.	Verified monthly.	Verified monthly.

Item	Indicator 1 Nox emission rate	Indicator 2 pH of scrubbing liquid	Indicator 3 Scrubber Pressure
Monitoring Frequency	The Nox concentration is continuously displayed. Hourly averages are electronically recorded and are basis for 24-hr average*. Deviations trigger evaluation of the Nox concentration monitoring system to ensure correct operation.	Once per shift if Nox monitor is operational. If Nox analyzer fails, pH will be recorded once per hour until Nox concentrations are being recorded.	Once per shift if Nox monitor is operational, otherwise once per hour until Nox concentration are able to be recorded.
Data Collection Procedure	Hourly average concentrations are recorded electronically.	Recorded manually	Recorded manually
Averaging Period	Hourly average ⁽³⁾	N/A	N/A
Recordkeeping	Maintain records for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken

(1) Nox monitor is not a CEMS as it does not meet the requirements of CEMS. However, it is an indicator system that can determine the proper operation of the control system.

(2) Or the most recent established ranges during which compliance was demonstrated.

(3) Daily average concentrations will be calculated when there is an individual hourly exceedance of the limit.

Compliance Assurance Monitoring for EPs 065, 067, and 068 – LP Grinder, Roughing Mill, and Bars Cut-off

I. Applicability

The emissions from the LP Grinder, Roughing Mill and Bars Cut-off are controlled by separate baghouses equipped with filters.

Applicable regulation: 401 KAR 51:017; 401 KAR 59:010

Emission limits: Opacity and PM limits as listed in permit V-23-003

II. Monitoring Approach

Monitoring of these units for compliance assurance is accomplished by:

- i. Qualitative opacity observations;
- ii. Inspection of baghouses; and
- iii. Pressure drop.

III. Rational for Selection of Performance Indicators

- i. Visible emission observation is selected because it is a good indicator of proper operation and maintenance. When operating optimally, there should be no visible emissions. If there are visible emissions, a Method 9 will be completed to determine or the unit will be immediately shut down to determine the issue.
- ii. Inspection of control equipment is an important indicator as it assures that the air pollution control equipment is working properly and there is no apparent clogging, leaks, or breaks in the baghouse filters.
- iii. Pressure drop is recorded to determine if there is an issue with the filter indicating either a clog or bypass, which prevents the proper flow of air through the filters.

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of baghouse	Indicator 3 Pressure drop
MONITORING APPROACH			
Measurement Approach	Visual opacity	Inspection of control equipment	Pressure drop
Indicator Range	An excursion is defined as any opacity equal to or greater than 20%.	An excursion is defined as failure to conduct inspection of equipment and operating with broken bags /clogged flume and reduced efficiency.	An excursion is defined as any pressure drop reading not within the range specified for each unit.
PERFORMANCE CRITERIA			
Data Representativeness	Qualitative observation of visible emission (QV) will be performed once every two calendar weeks when the unit is in operation. If emissions are visible, Reference Method 9 will be conducted.	NA	When in operation, the pressure drops should be within the limits specified: LP Grinder: 0.2 – 4 kPa Roughing Mill: 0.1 – 2 kPa Cutoff Station1: 0.1 – 2 kPa
Verification of Operational Status	Certified Reference Method 9 observer for	NA	NA

Item	Indicator 1 Visual opacity	Indicator 2 Inspection of baghouse	Indicator 3 Pressure drop
	Reference Method 9		
QA/QC Practices and Criteria	Certified Method 9 Opacity readers	NA	Verified to be working correctly monthly. If not working, it is replaced as gauges cannot be calibrated.
Monitoring Frequency	Once every two calendar weeks	Monthly	Monthly
Data Collection Procedure	Record the visual observations and quarterly Reference Method 9.	Record that the baghouse system is in proper working condition.	Manually (when unit is in operation)
Averaging	NA	NA	NA
Recordkeeping	Maintain manual records for 5 years	Maintain manual records for 5 years	Maintain manual records for 5 years
Reporting	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken	Number, cause of excursion, and corrective action taken