



may be entered or whether further action may be required.

Respectfully submitted,

/s/ Elizabeth L. Loeb  
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Certificate of Service

I, Elizabeth L. Loeb, hereby certify that a copy of the foregoing Notice of Appearance was served upon counsel of record through the Court's electronic filing system.

/s/ Elizabeth L. Loeb  
Elizabeth L. Loeb  
Counsel for the United States

UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

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UNITED STATES OF AMERICA	)
and the MICHIGAN DEPARTMENT OF	)
ENVIRONMENT, GREAT LAKES,	)
AND ENERGY,	)
	)
Plaintiffs,	)
	)
v.	) Civil Action No. 15-cv-11804
	)
CLEVELAND-CLIFFS STEEL	)
CORPORATION	)
(f/k/a AK STEEL CORPORATION),	)
	)
Defendant.	)
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**FIRST MATERIAL MODIFICATION TO THE CONSENT DECREE**

Plaintiffs United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), and the Michigan Department of Environment, Great Lakes, and Energy (“EGLE”), hereby submit this First Material Modification to the Consent Decree entered in this action on August 21, 2015 (“Consent Decree Modification”). [Dkt # 6]

WHEREAS Plaintiffs filed a complaint in this action on May 19, 2015, alleging that Defendant, AK Steel Corporation, now known as Cleveland-Cliffs Steel Corporation (“Defendant”), violated regulations that EPA has approved under Sections 110, 112 and 502 of the Clean Air Act (“Act”), 42 U.S.C. §§ 7410, 7412 and 7661a. The Michigan Department of Environmental Quality, now known as EGLE, joined the Complaint as a co-plaintiff, alleging all of the claims made by the United States and also alleging that Defendant violated Rule 901 of

Michigan's Air Pollution Control Rules, 2002 A.A.C.S., R 336.1901 ("Michigan Regulation 336.1901"). The Complaint alleged, *inter alia*, that during the previous five years, the Defendant's steel manufacturing facility, located at 4001 Miller Road in Dearborn, Wayne County, Michigan (the "Facility"), emitted pollutants into the air from various emission sources in amounts that exceeded limits established by the EPA-approved and federally enforceable Michigan State Implementation Plan ("Michigan SIP") and similar limits set forth in the Facility's federally enforceable Renewable Operating Permit issued pursuant to Title V of the Act. In addition, the Complaint alleged that Defendant failed to operate, maintain and monitor certain processes at the Facility in violation of the National Emission Standards for Hazardous Air Pollutants ("NESHAP") for the Integrated Iron and Steel Manufacturing Facilities, 40 C.F.R. Part 63, Subpart FFFFF.

WHEREAS, on August 21, 2015, the Court entered the Consent Decree in this case resolving all claims against Defendant. [Dkt #6]

WHEREAS the Consent Decree required the Defendant to pay a civil penalty, implement various injunctive relief, and complete a Salina Schools Air Filtration Project as a Supplemental Environmental Project.

WHEREAS as one injunctive relief measure, the Consent Decree required Defendant to, *inter alia*, review and report on Continuous Opacity Monitoring ("COM") data from its electrostatic precipitator ("ESP"), which is the Facility's primary pollution control equipment to remove particulate matter ("PM") from emissions from its Basic Oxygen Furnace ("BOF"), and to propose corrective actions in response to each instance of a 6-minute block average exceeding 20% opacity. Consent Decree, ¶ 20. In addition, the Consent Decree required Defendant to hire a

consultant to conduct an annual inspection of its ESP and take necessary corrective actions in response to the inspector's report. Consent Decree, ¶ 21.

WHEREAS, at the time the Consent Decree was entered, Defendant's ESP consisted of four vertical metal casings, each consisting of two compartments, in which PM emissions from the BOF are negatively charged when passing through a series of electrical fields, then collected on grounded electrodes (referred to as collection plates), and removed into a hopper to prevent their release to the atmosphere. Substantial renovation work on all four casings of the ESP in 2012 had significantly reduced PM emissions by the date of entry of the Consent Decree. Annual inspections and routine maintenance kept emissions from the ESP within permit limits. In 2019, however, Defendant began to experience a significant increase in the number of 6-minute block averages in excess of 20% opacity from its ESP as measured by the COM system. In addition, its consulting inspector found serious maintenance issues with the ESP, although throughout this period Defendant's visible emission observations conducted once per week in accordance with EPA Method 9 did not identify any violations of the applicable opacity limits for the ESP stack and all of Defendant's emission tests for PM have demonstrated compliance.

WHEREAS, in the ESP COM report for the first quarter of 2019, submitted on April 30, 2019, and supplemented on August 16, 2019, Defendant identified as a corrective action an ESP rebuild project that included replacing all four casings, which encompasses rebuilding all eight compartments, plus the addition of a new casing that contains a single new compartment with approximately the same pollution control capacity as each of the other four casings.

WHEREAS, thereafter Plaintiffs and Defendant (the "Parties") negotiated the scope and timing of an ESP project, as memorialized in this Consent Decree Modification (the "ESP

Project”).

WHEREAS the ESP Project, once completed, is designed to provide greater pollution control than the original ESP. Specifically, the rebuilt ESP will contain a total of 46 discharge electrode fields (“Fields”), comprised of five Fields in each Compartment in the Casings replaced in Phases II-V of the ESP Project pursuant to the proposed Modification below, compared with only four Fields in each Compartment of the original ESP. In addition, there are six Fields in the single Compartment of the new Casing installed in Phase I, each of which is larger than the Fields in the replaced Casings, such that each Field in the new Casing is equivalent to approximately one and two-thirds (i.e., 1.67) of a Field in the replaced Casings. This will result in greater emissions control than the prior ESP.

WHEREAS EGLE has issued the Facility a Renewable Operating Permit (“Permit”) that contains various emission limits and other requirements. In the recent past, EGLE has issued the Facility the following Violation Notices for exceedances of these limits and other requirements by Defendant, all of which are included in Appendix F hereto.

- a. A November 18, 2019 Violation Notice for an August 2019 performance test of the ESP stack that identified emissions above the lead (“Pb”) and manganese (“Mn”) emission limits in the Permit.
- b. A November 26, 2019 Violation Notice for a September 2019 performance test of the ESP stack that identified emissions above the Pb and Mn emission limits in the Permit.
- c. A March 16, 2020 Violation Notice based on a December 2019 performance test of the ESP stack that identified four categories of alleged noncompliance: (1) exceedances of the Pb and Mn emission limits in the Permit; (2) exceedance of the visible emission limit for the ESP based on visible emission observations conducted in accordance with EPA Method 9; (3) exceedances of the visible emission limit for the ESP based on COM data; and (4) improper operation of the ESP.

- d. A July 15, 2020 and August 2, 2022 Violation Notices that identified two categories of alleged Permit noncompliance: (1) exceedances of the visible emission limit for the ESP pursuant to COM data; and (2) improper operation of the ESP.
- e. A January 5, 2021 Violation Notice that identified three categories of alleged Permit noncompliance: (1) exceedances of the visible emission limit for the ESP pursuant to COM data; (2) improper operation of the ESP; and (3) failure to accurately report deviations.

WHEREAS Defendant has reported continuing violations of the BOF roof monitor opacity limits in its Permit for multiple days through its semiannual deviation report. These violations are of a number and extent similar to those identified in the original Complaint. A list of Violation Notices issued by EGLE for these violations is included in Appendix F.

WHEREAS, regarding the Violation Notices concerning emissions above the Pb and Mn emission limits in the Permit, Defendant is uncertain as to the impact the completed ESP Project will have on the Facility's compliance with Pb and Mn emission limits and asserts that higher emission limits may be technically warranted and supported by air dispersion modeling for the Mn initial threshold screening level and if ambient air monitor concentrations for Pb and Mn are satisfied with an ample margin of safety. Plaintiffs, however, believe the completed ESP Project is likely to address those issues such that no additional injunctive relief is required to resolve the Pb and Mn Violation Notices issued by EGLE. To address the uncertainty, this Consent Decree Modification requires additional testing to assess performance of the ESP Project as it relates to the control of Pb and Mn emissions.

WHEREAS the Parties have now agreed upon a modification to the Consent Decree to require implementation of the ESP Project, and to resolve the Violation Notices issued by EGLE included in Appendix F and the violations of roof monitor opacity limits, and agree to



incorporate such requirements into the Consent Decree through this Consent Decree Modification.

WHEREAS lengthy negotiations over all of the aspects of this Consent Decree Modification have prevented its entry before now. Nonetheless, Defendant completed the ESP Project in accordance with the negotiated schedule prior to the lodging of this Consent Decree Modification. Defendant also conducted stack testing after the completion of each phase of the ESP Project, with each stack test demonstrating compliance. Finally, Defendant established a minimum ESP inlet draft during testing after completion of Phases 2 through 4 of the ESP Project by conducting simultaneous visible emission observations of the BOF Shop roof monitor. Defendant thereafter tracked average draft and louver position during the oxygen blowing portion of the Steel Production Cycle. Root cause investigations were conducted and corrections implemented for three occasions where the minimum ESP inlet draft was not achieved.

WHEREAS, on May 16, 2023, Defendant conducted the initial performance test on the ESP required by Paragraph 22.5 as modified herein. EPA and EGLE will review the test report as soon as it is available and advise the Court as to the results if and when the United States moves to enter this Consent Decree Modification.

WHEREAS, this Consent Decree Modification also requires Defendant to perform a State supplemental environmental project (“SEP”) in accordance with all provisions of Appendix G, which consists of “(1) the purchase and delivery of one air purifier unit to each residential dwelling in South Dearborn; and (2) educational outreach on the benefits of improved indoor air quality.”

WHEREAS, on February 2, 2021, AK Steel Corporation changed its name to Cleveland-Cliffs Steel Corporation.

WHEREAS any modification to the Consent Decree requires a subsequent written agreement signed by the Parties. Consent Decree, ¶ 85. The Parties agree that this Consent Decree Modification constitutes a material change that requires Court approval to be effective. *Id.* The Parties recognize, and the Court by entering this Consent Decree Modification finds, that it has been negotiated at arms-length and in good faith and that this Consent Decree Modification is fair, reasonable, and in the public interest. A redline of the Consent Decree showing the modifications set forth herein is attached hereto as Exhibit 1.

NOW, THEREFORE, for good cause shown, without admission of any issue of fact or law, it is hereby Ordered, Adjudged, and Decreed:

1. Except as specifically provided in this Consent Decree Modification, all provisions of the original Consent Decree shall remain in full force and effect. No provision of the original Consent Decree is modified, superseded, or altered in any way except as specifically provided in this Consent Decree Modification.

2. The following definitions shall be added to the end of Section VI, Paragraph 7 of the Consent Decree.

“BOF Shop” shall mean the structure identified in the Facility’s Renewable Operating Permit as FGBOFSHOP and containing the emission units identified as EUBOF and EURELADLINGBOF.

“Business Day” shall mean any Monday, Tuesday, Wednesday, Thursday, and Friday, but not including any federal or State holiday.

“Calendar Week” shall mean the seven-day period starting on Monday and ending on Sunday.

“Casing” shall mean two Compartments of the ESP contained within a single metal shell except for the new Casing added during Phase I of the ESP Project that contains only a single Compartment.

“Compartment” shall mean a vertical chamber containing the Fields, collection plates, rappers, and other components used to charge, collect, and remove particulate matter from BOF emissions.

“Consent Decree Modification” shall mean the First Material Modification to the Consent Decree.

“Consent Decree” or “Decree” shall mean the Consent Decree entered in this action on August 21, 2015 and all Appendices attached thereto (as listed in Section XXV), as modified by the Consent Decree Modification. In the event of a conflict between the Decree and any Appendix, the Decree shall control.

“Effective Date of the Consent Decree Modification” shall mean the date upon which the First Material Modification to the Consent Decree is entered by the Court or a Motion to Enter the Consent Decree Modification is granted, whichever occurs first, as recorded on the Court’s docket.

“ESP Project” shall mean the ESP project set forth in Paragraph 4 of the Consent Decree Modification.

“Field” shall mean one of several electrical fields in a Compartment that negatively charges PM. The four replaced Casings each have two Compartments containing five Fields in each Compartment. The new Casing built during Phase I has only one Compartment containing six larger Fields designed to provide the same level of control as each of the four replaced Casings. Thus, while the ESP will contain 46 Fields upon completion of the ESP Project, it will contain 50 “Equivalent ESP Fields.”

“MDEQ” and “EGLE” shall both mean the Michigan Department of Environment, Great Lakes, and Energy.

“Operating Standard” shall mean the number of Equivalent ESP Fields operating during a compliant performance test conducted pursuant to Paragraph 22.2.a.

“PM” shall mean particulate matter.

“Reference Method 9C” or “EPA Method 9” shall mean the visible emissions test method currently described, respectively, in Mich. Admin. Code R. 336.2032 or in 40 C.F.R. Part 60, Appendix A.

“Renewable Operating Permit” shall mean the permit issued to the Facility by EGLE, pursuant to Title V of the CAA, 42 U.S.C. § 7661 *et seq.*, and Mich. Admin. Code R. 336.1210, including any revisions thereto and renewals.

“Steel Production Cycle” shall mean the operations conducted within the BOF Shop that are required to produce each batch of steel, including scrap charging, preheating, hot metal charging, primary oxygen blowing, sampling (vessel turn-down and turn-up), additional oxygen blowing, tapping, and deslagging. The Steel Production Cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

“Visible Emission Standard” shall mean a visible emission of a density greater than a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity, and excluding visible emissions due to uncombined water vapor, pursuant to Mich. Admin. Code R 336.1301 and General Condition 11 of the Facility’s Renewable Operating Permit.

3. Paragraph 11.1 within Section V of the Consent Decree shall be added as follows:

11.1. Within 30 Days after the Effective Date of this Consent Decree Modification, Defendant shall pay a civil penalty for the violations identified in Appendix F of \$81,380 to the General Fund of the State of Michigan in the form of a check made payable to the “State of Michigan” and mailed to the Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier’s Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments made to the State of Michigan pursuant to this Consent Decree shall include “Payment Identification Number AQD40291” on the front of the check and/or in the cover letter with the payment.

4. Paragraph 22.1 within Section VI.B of the Consent Decree shall be added as follows:

22.1 ESP Project. Defendant shall install a new ESP Casing that consists of a single Compartment that has the same air handling capacity and pollution control efficiency as an existing ESP Casing, and is otherwise functionally equivalent to or greater than the design standards of two current Compartments. Defendant shall also replace each of its four existing ESP Casings, including their Compartments. The installation of the new Casing and the replacement of the four existing ESP Casings will be carried out in five phases, one for each Casing. Defendant shall complete each phase of the ESP Project in accordance with the following schedule:

<b>ESP Project Phase</b>	<b>Completion Date</b>
I. Install new ESP Casing	June 24, 2021
II. Replace one existing ESP Casing	Nov. 30, 2021
III. Replace a second existing ESP Casing	May 31, 2022
IV. Replace a third existing ESP Casing	October 25, 2022
V. Replace a fourth existing ESP Casing	March 31, 2023

5. Paragraph 22.2 within Section VI.B of the Consent Decree shall be added as follows:

22.2

a. Establishment of Operating Standard: Within 60 Days after the completion of the ESP Project as outlined in Paragraph 22.1, Defendant shall complete performance testing at the ESP stack to demonstrate compliance with applicable standards for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, lead (Pb), manganese (Mn), and visible emissions. The number of Equivalent ESP Fields used during this testing shall serve as the ESP's Operating Standard. Unless otherwise specified herein, all future performance tests conducted pursuant to this Consent Decree will be conducted while operating the same number of Equivalent ESP Fields as the Operating Standard. Testing for Pb and Mn shall be performed in accordance with EPA Method 29 and shall include testing of the ESP stack and the secondary baghouse stack. Testing for visible emissions at the ESP stack shall be performed in accordance with EPA Method 9 and shall be conducted during a minimum of three Steel Production Cycles and for a minimum of 180 minutes in duration.

b. Testing Protocol: Defendant shall submit to EPA and EGLE a test protocol at least 60 Days prior to the test date required in Paragraph 22.2.a. EPA, after consulting with EGLE, may either approve the submission or decline to approve it and provide written comments. Within 10 Days of receiving EPA's written comments, Defendant shall either: (1) alter the submission consistent with EPA's written comments and provide the submission to EPA for final approval, or (2) submit the matter for dispute resolution under Section XII of the Consent Decree. After approval of the performance test protocol, all subsequent performance tests required by this Consent Decree may be conducted pursuant to the approved protocol, respectively, except as provided for in Paragraph 22.2.c, below. Defendant shall provide notice of the performance test date or dates at

least 30 Days prior to the commencement of the performance test and shall: (1) affirm that the performance test will be conducted according to the approved performance test protocol; and (2) identify which Fields will operate during the performance test. Unless otherwise specified herein, all subsequent performance tests required by this Consent Decree must be conducted using a different combination of Fields. The test results shall be submitted to EPA and EGLE no later than 60 Days after completion of each test.

c. Revising Testing Protocol: If Defendant elects to conduct a performance test under a different protocol or EPA test method, or with a different vendor from a protocol/vendor previously approved under Paragraph 22.2.b above, then at least 30 Days prior to conducting such performance test, Defendant shall submit a new protocol to EPA and EGLE for approval.

6. Paragraph 22.3 within Section VI.B of the Consent Decree shall be added as

follows:

22.3. Annual Inspections: Annual inspections of all ESP Casings existing as of August 21, 2015 shall continue under Paragraph 21 of this Consent Decree until the ESP Project is complete. The requirements of Paragraph 21 cease upon replacement of the last ESP Casing pursuant to Phase V of the ESP Project.

7. Paragraph 22.4 within Section VI.B of the Consent Decree shall be added as

follows:

22.4. Compliance with Emission Limits:

a. On and after the Effective Date of this Consent Decree Modification, Defendant shall comply with the following: (1) the emission limits for the ESP stack contained in the Facility's Renewable Operating Permit for emission unit EUBOF for PM, PM<sub>10</sub>, and PM<sub>2.5</sub>; and (2) the 20% opacity limit for the EUBOF roof monitor and the 15% opacity limit for FGBOFSHOP roof monitor in the Facility's Renewable Operating Permit.

b. On and after the Effective Date of this Consent Decree Modification, Defendant shall also comply with the following: (1) Visible Emission Standard for the ESP stack contained in General Condition 11 of the Facility's Renewable Operating Permit; and (2) the emission limits for the ESP stack and the secondary baghouse stack contained in the Facility's Renewable Operating Permit for emission unit FGBOFSHOP for Pb and Mn. On and after the completion of the ESP Project and after the establishment of an Operating Standard as defined

Paragraph 22.2(a), Defendant shall operate the ESP at the Operating Standard or more during Steel Production Cycles at the BOF Shop. For the purposes of this Consent Decree only, compliance with the Visible Emission Standard shall be determined based on EPA Method 9 observations taken in accordance with Paragraph 22.6. At the same time Defendant submits its quarterly report under Paragraph 22.8(e), Defendant shall report to EPA and EGLE any periods in which the ESP is operating below the Operating Standard when the BOF Shop is operating, including the date, the length of time, and the reason for operating below the Operating Standard.

For purposes other than this Consent Decree, EGLE and EPA reserve their rights to determine compliance with the Visible Emission Standard using EPA Method 9 observations and COM or other credible evidence, and Defendant reserves its right to contest EGLE and EPA's rights to determine compliance using COM or other credible evidence.

8. Paragraph 22.5 within Section VI.B of the Consent Decree shall be added as

follows:

22.5.

- a. Documentation of Completion of the ESP Project. Defendant shall submit to EPA and EGLE:
- i. As-built general arrangement drawings of the completed ESP within 60 Days after completion of Phase V of the ESP Project;
  - ii. A copy of the operation and maintenance plan for the ESP prepared in compliance with the requirements of the Iron and Steel NESHAP at 40 C.F.R. § 63.7800(b) within 30 Days after completion of Phase V of the ESP Project; and
  - iii. A copy of the ESP's operating manual within 180 Days after completion of Phase V of the ESP Project.
- b. Testing After Completion of the ESP Project. No later than 10 Days after the Effective Date, Defendant shall conduct an initial performance test followed by eight successive performance tests conducted once each calendar quarter with no performance tests conducted closer than two months apart. For the first three performance tests, Defendant shall test the ESP stack for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and visible emissions and the ESP stack and secondary baghouse stack for Pb and Mn. For the following six performance tests, Defendant shall test the ESP stack and the secondary baghouse stack for Pb and Mn. Testing shall be conducted using the same testing methods used in Paragraph 22.2.b or 22.2.c. Defendant shall provide

notice of the performance test date or dates at least 30 Days prior to the commencement of the test in which it shall: (1) affirm that the performance test will be conducted according to the approved applicable performance test protocol or submit a new performance test protocol for approval; and (2) identify which Fields will be in operation. The test results shall be submitted to EPA and EGLE no later than 60 Days after completion of each test.

c. Testing the Entire ESP. Within twelve months after completion of the ESP Project, Defendant shall conduct a performance test of the ESP stack for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and visible emissions and of the ESP stack and secondary baghouse stack for Pb and Mn while operating all five Casings with no Fields out of service. Testing shall be conducted using the same testing methods used in Paragraph 22.2.b or 22.2.c. Defendant shall provide notice of the performance test date or dates at least 30 Days prior to the commencement of the test and may be conducted on the same date as another required performance test.

9. Paragraph 22.6 within Section VI.B of the Consent Decree shall be added as

follows:

22.6. Visible Emission Measurements. On and after the Effective Date of this Consent Decree Modification, Defendant shall measure the visible emissions at the ESP stack by: (1) conducting EPA Method 9 visible emission observations for at least one Steel Production Cycle per Calendar Week, and (2) measuring 6-minute block averages using COM. If either EPA Method 9 observations or COM data identify an exceedance of the Visible Emission Standard, then Defendant shall, starting no later than the next Business Day that the BOF is operating following the exceedance, increase the frequency of EPA Method 9 observations to two Steel Production Cycles per day on three days over a seven-day period until both COM data and EPA Method 9 observations for the ESP stack show 14 consecutive Days without an exceedance of the Visible Emission Standard. Defendant shall report these measurements and any exceedances on a quarterly basis with the reporting required under Paragraph 20. Any COM data recorded when the COM is undergoing repair or a calibration check shall not be considered in determining the Visible Emission Standard in Section VI.

10. Paragraph 22.7 within Section VI.B of the Consent Decree shall be added as

follows:

22.7. BOF Shop Roof Monitor Compliance Measures. On and after the Effective Date of this Consent Decree Modification, Defendant shall comply with the following requirements:

a. Increased ESP Ductwork Inspections.



i. Defendant shall inspect the exterior of the guillotine relief dampers, relief chambers, wye sections, downcomers, and dirty gas main on the ESP on a weekly basis for any exhaust leaks or openings. Records of each inspection, to include the name of the inspector, the time and date of the inspection, and the location of any leak(s) or opening(s), shall be maintained and submitted quarterly to EPA and EGLE.

ii. If the inspection identifies any exhaust leak or opening in the guillotine relief dampers, relief chambers, wye sections, downcomers, and/or dirty gas main, repairs shall be initiated. If the exhaust leak(s) or opening(s) is identified during an operating period, temporary repairs shall be completed within twenty-four (24) hours of the identification of the leak(s) or opening(s). If the leak(s) or opening(s) is identified during an outage, repairs shall be completed during the outage.

iii. Following completion of either temporary or permanent repairs on an exhaust leak or opening in a guillotine relief damper, relief chamber, wye section, downcomer, or the dirty gas main, visible emissions observations of the FGBOFSHOP roof monitor shall be conducted in accordance with Reference Method 9C for a minimum of two hours which must include two complete Steel Production Cycles. Observations conducted to comply with Paragraph 22.7.b may also serve to comply with this observation requirement.

b. Additional BOF Shop Roof Monitor VE Observations. Starting with the first full week after the Effective Date of the Consent Decree Modification, Defendant shall increase the number of visible emission observations required pursuant to Paragraph 22 of FGBOFSHOP in the Facility's Renewable Operating Permit from three times per Calendar Week to four times per Calendar Week. All other requirements of Paragraph 22 remain unchanged. If the BOF Shop is not producing steel for more than 24 consecutive hours within a Calendar Week, then the additional fourth visible emission observation is not required for that Calendar Week. If three or fewer exceedances of the FGBOFSHOP roof monitor opacity limit of 15% occur for 180 consecutive days, then Defendant can terminate the additional fourth visible emission observation.

11. Appendix F, the list of Violation Notices and deviations issued by EGLE to Defendant, is attached hereto and made part of the Consent Decree.

12. Appendix G, attached hereto, is made part of the Consent Decree and Section VIII is renamed "State-Only Supplemental Environmental Project."

13. Paragraphs 27 to 36 pertaining to the SEP in the 2015 Consent Decree, which has been completed, are deleted and replaced with the following:

27. Defendant shall implement a Supplemental Environmental Project (“SEP”), the South Dearborn Residential Indoor Air Quality Project, in accordance with all provisions of Appendix G.

28. Defendant is responsible for the satisfactory completion of the SEP in accordance with the requirements of this Consent Decree. Defendant may use contractors or consultants in planning and implementing the SEP.

29. With regard to the SEP, Defendant certifies the truth and accuracy of each of the following:

a. that all cost information provided to EGLE in connection with EGLE’s approval of the SEP is complete and accurate and that Defendant in good faith estimates that the cost to implement the SEP is \$244,000;

b. that, as of the date of executing the Consent Decree Modification, Defendant is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;

c. that the SEP is not a project that has any direct financial benefit to Defendant;

d. that Defendant has not received and will not receive credit for the SEP in any other enforcement action;

e. that Defendant will not receive any reimbursement for any portion of the SEP from any other person; and

f. that Defendant is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEP described in Paragraph 27. For purposes of this certification, the term “open federal financial assistance transaction” refers to a grant, cooperative agreement, loan, federally-guaranteed loan, or other mechanism for providing federal financial assistance whose performance period has not yet expired.

30. SEP Completion Report.

Within 30 Days after the date set for completion of the SEP, Defendant shall submit a SEP Completion Report to EGLE, in accordance with Section XVI (Notices). The SEP Completion Report shall contain the following information:

- a. a detailed description of the SEP as implemented;
- b. a description of any problems encountered in completing the SEP and the solutions thereto;
- c.. an itemized list of all eligible SEP costs expended;
- d. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and
- e. a description of the environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).

31. EGLE may, in its sole discretion, require information in addition to that described in the preceding Paragraph, in order to evaluate Defendant's SEP Completion Report.

32. After receiving the SEP Completion Report, EGLE shall notify Defendant whether or not Defendant has satisfactorily completed the SEP. If Defendant has not completed the SEP in accordance with this Consent Decree, stipulated penalties may be assessed under Section X.

33. Disputes concerning the satisfactory completion of the SEP and the amount of eligible SEP costs may be resolved under Section XII (Dispute Resolution). No other disputes arising under this Section shall be subject to Dispute Resolution.

34. Each submission required under this Section shall be signed by an official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 41.

35. Any public statement, oral or written, in print, film, or other media, made by Defendant making reference to the SEP under this Consent Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, *United States and Michigan v. Cleveland-Cliffs Steel Corporation*, taken on behalf of the Michigan Department of Environment, Great Lakes, and Energy under the Clean Air Act."

36. [Reserved]

14. Paragraph 47.b of the Consent Decree shall be amended to include the following additional compliance milestones subject to the stipulated penalties in Paragraph 47.a.:

- (3) Completion of Phases I through V of the ESP Project by its corresponding deadline as set forth in Paragraph 22.1.
- (4) Performance of the testing within the required time frames as set forth in Paragraphs 22.2 and 22.5.
- (5) Compliance with the emission limits for PM, PM<sub>10</sub>, PM<sub>2.5</sub> for the ESP stack contained in the Facility’s Renewable Operating Permit for emission unit EUBOF or other applicable permit demonstrated through the performance testing required by Paragraphs 22.2 and 22.5. Stipulated penalties may be imposed for each day of violation from the date performance testing demonstrates an exceedance of the Renewable Operating Permit limits until compliance is demonstrated, in accordance with 42 U.S.C. § 7413(e)(2).
- (6) Compliance with the Operating Standard requirement of Paragraph 22.4.b(2).
- (7) Performance of the visible emissions observations and the reporting of the results required by Paragraph 22.6.
- (8) Compliance with the requirements of Paragraphs 22.7.a(i), 22.7.a(ii), and 22.8.

15. Paragraph 47.d within Paragraph 47 of the Consent Decree shall be added as follows:

Defendant’s failure to complete Phase V of the ESP Project by its corresponding deadline as set forth in Paragraph 22.1 shall result in a stipulated penalty of:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$700.....	1st through 14th day
\$1,500.....	15th through 30th day
\$5,000.....	31 <sup>st</sup> Day and beyond

16. Paragraph 47.e within Paragraph 47 of the Consent Decree shall be added as follows:

The following stipulated penalties shall accrue per violation per Day, up to a maximum of \$54,000 for each failure to comply with the emission limits for Pb or Mn for the Secondary Baghouse and ESP stacks in the Facility's Renewable Operating Permit for flexible group FGBOFSHOP or other applicable permit demonstrated through the testing required by Paragraphs 22.2 and 22.5:

<u>Penalty Per Violation Per day</u>	\$600
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Stipulated penalties may be imposed for each day of violation from the date performance testing demonstrates an exceedance of the Renewable Operating Permit limit until compliance is demonstrated, in accordance with 42 U.S.C. § 7413(e)(2). Any stipulated penalties imposed for failure to comply with the emission limit for Pb or Mn would be paid only to the State.

17. Paragraph 47.f within Paragraph 47 of the Consent Decree shall be added as follows:

A stipulated penalty of \$1,500 per violation shall accrue for each violation of the Visible Emission Standard for the ESP stack, the 20% opacity limit for EUBOF roof monitor, and 15% opacity limit for FGBOFSHOP roof monitor in the Facility's Renewable Operating Permit demonstrated through the EPA Method 9 or Reference Method 9C observations by EGLE or EPA or as required by Paragraphs 22.2, 22.5, 22.6, and 22.7.a(iii). Stipulated penalties may be imposed for each day of violation from the date an EPA Method 9 or Reference Method 9C observation demonstrates an exceedance of the Visible Emission Standard until compliance is demonstrated, in accordance with 42 U.S.C. § 7413(e)(2).

18. Paragraph 48.b within Section X of the Consent Decree shall be replaced with the following:

b. If Defendant fails to perform the SEP pursuant to this Consent Decree Modification, Defendant shall pay a stipulated penalty of \$244,000 to the State. If the SEP is completed in accordance with Paragraphs 27-28 and 32 of this Consent Decree Modification but Defendant spends less than the \$244,000 required to be spent for the project, Defendant shall pay to the State a stipulated penalty equal to the difference between \$244,000 and the amount actually spent.

19. The references to Paragraph 23 in Paragraphs 62, 64, and 66 shall be changed from "Paragraph 23" to "Paragraphs 23, 27-36".

20. Paragraph 73.1 within Section XIV of the Consent Decree shall be added as follows:

This Consent Decree also resolves any administrative or civil judicial actions that could have been brought by the State of Michigan or EGLE regarding violations alleged in the Violation Notices issued by EGLE, and the roof monitor violations, included in Appendix F.

21. Paragraph 80 within Section XVI of the Consent Decree shall be deleted and replaced with the following.

Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and sent by electronic mail to the following email addresses:

As to the United States: eescasemanagement.enrd@usdoj.gov  
Re: DJ# 90-5-2-1-10702

As to EPA: Air Enforcement and Compliance Assurance Branch  
U.S. Environmental Protection Agency, Region 5  
R5airenforcement@epa.gov

and

Louise Gross  
Associate Regional Counsel  
U.S. Environmental Protection Agency, Region 5  
gross.louise@epa.gov

and

Daniel Schaufelberger  
Environmental Scientist  
Environmental Protection Agency, Region 5  
Schaufelberger.daniel@epa.gov

As to EGLE: Elizabeth Morrisseau  
Assistant Attorney General  
Environment, Natural Resources, and Agricultural Division  
Michigan Attorney General's Office  
MorrisseauE@michigan.gov

and  
Katherine Koster  
Michigan Department of Environment, Great Lakes, and Energy  
Detroit District Office  
Kosterk1@michigan.gov

As to Defendant:

Traci Forrester  
Cleveland-Cliffs Inc.  
Executive Vice President, Environmental & Sustainability  
traci.forrester@clevelandcliffs.com

22. Paragraph 87 of the Consent Decree (Termination) shall be replaced with the following:

This Consent Decree may be terminated when the United States determines (after consultation with EGLE) that Defendant has satisfactorily completed performance of all of the following Consent Decree obligations:

- a. received new or amended federally-enforceable non-Renewable Operating Permits based upon the applications submitted by Defendant pursuant to Paragraph 25;
- b. received new or amended Renewable Operating Permits based upon the applications submitted by Defendant pursuant to Paragraph 26;
- c. satisfactorily completed the ESP Project pursuant to Paragraph 22.1 or demonstrated the permanent and unrecoverable shutdown of the BOF;
- d. completed 18 months of operation after satisfactory completion of the ESP Project with no exceedance of the Visible Emission Standard for the ESP stack, as demonstrated through the EPA Method 9 observations required by Paragraph 22.6;
- e. maintained substantial compliance with the Visible Emission Standard for the BOF Shop roof monitor, as demonstrated through Reference Method 9C observations;

- f. conducted the performance tests as required by Paragraphs 22.2 and 22.5;
- g. conducted the tests demonstrating compliance with emission limits for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and the Visible Emission Standard in accordance with Paragraphs 22.2 and 22.5; and
- h. paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree then due and owing.

23. Section VI.A (Environmental Management System) (Paragraphs 12-18) is deleted from the Consent Decree as completed and no longer applicable.

24. The following is added to the end of Paragraph 95.

“Appendix F” is the list of Violation Notices and deviations issued by EGLE to Defendant.

“Appendix G” is the State-only SEP.

25. The following Section XXVI is added at the end of the Consent Decree

**XXVI. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION**

96. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2), performance of the requirements in Paragraph 22 and Paragraphs 27-36 is restitution remediation, or required to come into compliance with law.

26. This Consent Decree Modification shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree Modification disclose facts or considerations indicating that the Consent Decree Modification is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree Modification without further notice.

27. If for any reason the Court should decline to approve this Consent Decree Modification in the form presented, this Consent Decree Modification is voidable at the sole



discretion of any Party in writing within 30 Days of the Court's action. If any Party elects to void the Consent Decree Modification, the terms of the Consent Decree Modification may not be used as evidence in any litigation between the Parties and the original Consent Decree shall remain fully in effect and enforceable.

28. The undersigned representative of Defendant, of EGLE, and of the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree Modification and to execute and legally bind such Party to this document.

29. This Consent Decree Modification may be executed in counterparts.

SO ORDERED.

Dated and entered this 5th day of April, 2024

s/Linda V. Parker  
\_\_\_\_\_  
LINDA V. PARKER  
UNITED STATES DISTRICT JUDGE

THE UNDERSIGNED PARTY enters into this Consent Decree Modification in the matter of United States and Michigan EGLE v. Cleveland-Cliffs Steel Corp., No. 15-cv-11804 (E.D. Mich.)

FOR THE UNITED STATES OF AMERICA:

TODD KIM  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice  
Washington, DC

October 17, 2023  
Date

/s/ Elizabeth L. Loeb  
ELIZABETH LOEB  
Senior Attorney  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
Washington, DC 20044-7611  
Tel: 202-616-8916  
Fax: (202) 616-6584  
Email: [elizabeth.loeb@usdoj.gov](mailto:elizabeth.loeb@usdoj.gov)

DAWN N. ISON  
United States Attorney  
Eastern District of Michigan

/s/John Postulka  
JOHN POSTULKA (P71881)  
Assistant United States Attorney  
211 W. Fort Street, Suite 2001  
Detroit, Michigan 48226  
(313) 226-9118  
[john.postulka2@usdoj.gov](mailto:john.postulka2@usdoj.gov)

THE UNDERSIGNED PARTY enters into this Consent Decree Modification in the matter of United States and Michigan EGLE v. Cleveland-Cliffs Steel Corp., No. 15-cv-11804 (E.D. Mich.).

FOR THE U.S. ENVIRONMENTAL PROTECTION  
AGENCY:

ROBERT  
KAPLAN

Digitally signed by ROBERT KAPLAN  
Date: 2023.09.21 08:39:53 -05'00'

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ROBERT A. KAPLAN  
Regional Counsel  
U.S. Environmental Protection Agency, Region 5

Louise Gross

Digitally signed by Louise  
Gross  
Date: 2023.09.11  
14:17:26 -05'00'

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LOUISE GROSS  
Associate Regional Counsel  
U.S. Environmental Protection Agency, Region 5  
Office of Regional Counsel  
77 West Jackson Blvd.  
Chicago, IL 60604-3507  
(312) 886-6844  
Email: [gross.louise@epa.gov](mailto:gross.louise@epa.gov)

THE UNDERSIGNED PARTY enters into this Consent Decree Modification in the matter of United States and Michigan EGLE v. Cleveland-Cliffs Steel Corp., No. 15-cv-11804 (E.D. Mich.).

FOR THE MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY:

DANA NESSEL  
Attorney General

July 24, 2023  
Date

/s/ Elizabeth Morrisseau  
ELIZABETH MORRISSEAU  
Assistant Attorney General  
Michigan Department of Attorney General  
Environment, Natural Resources and Agriculture Division  
P.O. Box 30755  
Lansing, MI 48909  
(517) 335-7664  
Email: morrisseaue@michigan.gov

July 31, 2023



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AARON B. KEATLEY  
Chief Deputy Director  
Michigan Department of Environment, Great Lakes, and  
Energy  
P.O. Box 30473  
Lansing, MI 48909-7973  
(517) 284-6700

THE UNDERSIGNED PARTY enters into this Consent Decree Modification in the matter of United States and Michigan EGLE v. Cleveland-Cliffs Steel Corp., No. 15-cv-11804 (E.D. Mich.).

FOR CLEVELAND-CLIFFS STEEL CORPORATION:

7/21/2023  
Date



TRACI L. FORRESTER  
Executive Vice President, Environmental & Sustainability

**APPENDIX F**

**VIOLATION NOTICES AND DEVIATIONS**

<u>Date of Notice</u>	<u>Date of Violation</u>	<u>Subject</u>
November 18, 2019	August 2019	Pb and Mn emissions
November 26, 2019	September 2019	Pb and Mn emissions
March 16, 2020	December 2019	Pb and Mn emissions, ESP opacity exceedances
July 15, 2020	1 <sup>st</sup> Quarter 2020	ESP opacity exceedances
January 5, 2021	3 <sup>rd</sup> Quarter 2020	ESP opacity exceedances and failure to report
August 2, 2022	1 <sup>st</sup> Quarter 2022	ESP opacity exceedances
December 19, 2022	December 2022	EUBOF opacity exceedances
Various	10/2015-12/2022	FGBOFSHOP opacity exceedances
Various	02/2016-12/2023	EUBOF opacity exceedances



DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

GRETCHEN WHITMER  
GOVERNOR

November 18, 2019

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On October 15, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), received the stack test report for the Basic Oxygen Furnace (BOF) and BOF Shop Operations conducted on August 13 and 14, 2019, at AK Steel Dearborn Works located at 4001 Miller Road, Dearborn, Michigan. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the stack test report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.10	The stack test result was 0.095 pounds per hour (pph) of Pb(lead) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.067 pph for Pb.
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.12	The stack test result was 0.23 pph of Mn(manganese) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 2  
November 18, 2019

		The permit limit for the FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.10 pph for Mn.
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Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by December 9, 2019 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel Dearborn Works believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Ms. Wilhemina McLemore, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE





GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

November 26, 2019

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On November 18, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), received the stack test report for testing conducted on September 17, 2019. Testing was conducted on the Basic Oxygen Furnace (BOF) and BOF Shop Operations at AK Steel Dearborn Works ("AK Steel") located at 4001 Miller Road, Dearborn, Michigan. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the stack test report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.10	The stack test result was 0.158 pounds per hour (pph) of Pb(lead) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.067 pph for Pb.
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.12	The stack test result was 0.16 pph of Mn(manganese) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for the FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.10 pph for Mn.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 2  
November 26, 2019

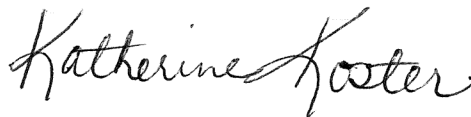
Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by December 17, 2019 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel Dearborn Works believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Mr. Neil Gordon, AG  
Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Ms. Wilhemina McLemore, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE

GRETCHEN WHITMER  
GOVERNORSTATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICELIESL EICHLER CLARK  
DIRECTOR

March 16, 2020

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On March 12, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 4<sup>th</sup> quarter of 2019 as well as the 2019 ESP annual inspection report for AK Steel Dearborn Works (AK Steel hereafter) located at 4001 Miller Road, Dearborn, Michigan. Additionally, AQD reviewed the stack test report received on February 20, 2020, for the BOF and BOF Shop Operations test conducted on December 17, 2019. Staff reviewed the aforementioned reports to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the reports, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, Special Condition (SC) I.10	The stack test result was 0.123 pounds per hour (pph) of Pb (lead) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.067 pph for Pb.
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, SC I.12	The stack test result was 0.18 pph of Mn (manganese) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.

Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 2  
 March 16, 2020

		<p>The permit limit for the FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.10 pph for Mn.</p>
EUBOF	<p>ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)</p>	<p>Based on the certified Method 9 visible emissions readings of the ESP taken during the August 14, 2019 stack test, an exceedance of the 20% 6-minute average limit was observed.</p> <p>On August 14, 2019, from 3:25:15 PM to 3:31:00 PM, the 6-minute average opacity was 30%.</p> <p>Additionally, quarterly COMS opacity reports contain exceedances of the 20% 6-minute average opacity limit from the ESP stack during every quarter starting with the 4<sup>th</sup> quarter of 2015 through the 4<sup>th</sup> quarter of 2019.</p>
EUBOF	<p>ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1;  R 336.1910</p>	<p>In 2019, the ESP failed stack testing for Pb and Mn in August, September, and December.</p> <p>The ESP has ongoing exceedances of the 20% 6-minute average opacity limit as recorded by the COMS.</p> <p>The 2019 ESP annual inspection report notes that many components are beyond the point of repair and need to be replaced.</p> <p>This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance</p>

Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 3  
 March 16, 2020

		with the rules and existing law.
--	--	----------------------------------

Emissions of Mn and Pb at the BOF Shop operations are limited within ROP No. MI-ROP-A8640-2016a, FGBOFSHOP based on the combined value in pounds per hour from the ESP stack and the Secondary Baghouse stack. The limits are 0.067 pph for lead (SC I.10) and 0.10 pph for manganese (SC I.12). AK Steel measured emissions of lead and manganese from the ESP stack and the Secondary Baghouse stack on December 17, 2019, following similar testing conducted by AK Steel on August 13-14, 2019, and September 17, 2019. In each instance the measured emission rate of lead and manganese exceeded the allowed emission limit as documented in the table below:

	August 2019 (pph)	September 2019 (pph)	December 2019 (pph)
Mn ESP	0.22	0.16	0.17
Mn Secondary BH	0.014	0.004	0.0057
Total Mn	0.23	0.16	0.18
Permit Limit	0.1	0.1	0.1
Pb ESP	0.0921	0.141	0.12
Pb Secondary BH	0.0025	0.017	0.0025
Total Pb	0.095	0.158	0.123
Permit Limit	0.067	0.067	0.067

Each of the three measured emission rates for lead and manganese represents a violation of MI-ROP-A8640-2016a, FGBOFSHOP, SC I.10 and SC I.12 respectively. The violations associated with the August 13-14 and September 17 testing events have been previously documented by the AQD in Violation Notices of November 18, 2019 and November 26, 2019 respectively.

Further, it is noted in each case that the measured emissions from the ESP stack, alone, exceed the permitted emission limit for the combined stacks.

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, GC 11 state, in part, that a person "shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity."

During the August 2019 stack test, a certified Method 9 reader performed visible emissions readings of the ESP stack. Those readings were enclosed in the test report. On August 14, 2019, from 3:25:15 PM to 3:31:00 PM, the 6-minute average opacity was

Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 4  
 March 16, 2020

30%. This is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

Additionally, AK Steel is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, AK Steel is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. Opacity exceedances reported by AK Steel are summarized in the table below, after correcting for the exception allowed within R 336.1301(1)(a): "one 6-minute average per hour of not more than 27% opacity."

	Number of COMS opacity exceedances per quarter			
	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
2015				19
2016	127	31	33	125
2017	63	16	18	28
2018	90	41	49	92
2019	313	145	47	65

Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, failed stack tests, and annual inspection report findings, the ESP is not being maintained and operated in a satisfactory manner. As such, AK Steel is in violation of MI-ROP-A8640-2016a, EUBOF, SC IV.1, and R 336.1910.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by April 6, 2020 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

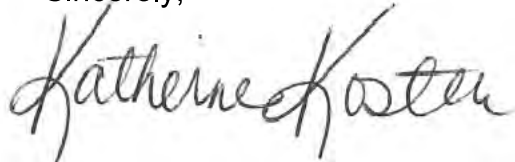
Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 5  
March 16, 2020

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katherine Koster". The signature is written in a cursive style with a large, prominent initial 'K'.

Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Ms. Jenine Camilleri, EGLE  
Mr. Christopher Ethridge, EGLE  
Dr. April Wendling, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

July 15, 2020

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On July 6, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 1<sup>st</sup> quarter of 2020 for AK Steel Dearborn Works (AK Steel hereafter) located at 4001 Miller Road, Dearborn, Michigan. The report was received on May 12, 2020. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)	The quarterly COMS opacity report for the 1 <sup>st</sup> quarter of 2020 contained 71 exceedances of the 20% 6 minute average opacity limit at the ESP stack.
EUBOF	ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1;  R 336.1910	The ESP has ongoing exceedances of the 20% 6 minute average opacity limit as recorded by the COMS.  This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance with the rules and existing law.



Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 2  
July 15, 2020

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, GC 11 state, in part, that a person “shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.”

AK Steel is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, AK Steel is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. For the 1<sup>st</sup> quarter of 2020, after correcting for the exception allowed within R 336.1301(1)(a): “one 6 minute average per hour of not more than 27% opacity” and excluding calibration checks, there were 71 exceedances reported. Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, the ESP is not being maintained and operated in a satisfactory manner. As such, AK Steel is in violation of MI-ROP-A8640-2016a, EUBOF, SC IV.1, and R 336.1910.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by August 5, 2020 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

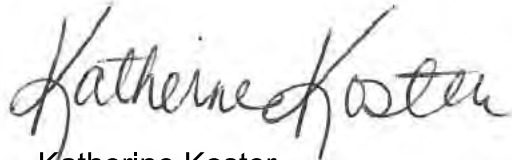
Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 3  
July 15, 2020

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katherine Koster". The signature is written in a cursive, flowing style.

Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

January 5, 2021

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On November 30, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) opacity report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 3rd quarter of 2020 for AK Steel Dearborn Works (AK Steel hereafter) located at 4001 Miller Road, Dearborn, Michigan. The report was received on October 30, 2020. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the quarterly COMS opacity reports, including the 3<sup>rd</sup> quarter 2020 report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)	The quarterly COMS opacity report for the 3 <sup>rd</sup> quarter of 2020 contained 29 exceedances of the 20% 6 minute average opacity limit at the ESP stack.

Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 2  
 January 5, 2021

<p>EUBOF</p>	<p>ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1;  R 336.1910</p>	<p>The ESP has ongoing exceedances of the 20% 6 minute average opacity limit as measured and recorded by the COMS.  This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance with the rules and existing law.</p>
<p>EUBOF</p>	<p>ROP No. MI-ROP- A8640-2016a, Section 1, GCs 19, 21, and 23;  R 336.1213(3)(c);  R 336.1213(4)(c)</p>	<p>From the 4<sup>th</sup> quarter of 2015 through the 1<sup>st</sup> quarter of 2020, each quarterly COMS opacity report contains exceedances of the 20% 6-minute average opacity limit from the ESP stack yet these exceedances are not identified as deviations in the semi-annual and annual ROP certifications.  This is a failure by the Responsible Official to accurately and completely report deviations which should have been reported.</p>

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11 state, in part, that a person “shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.”

AK Steel is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, AK Steel is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. For the 3<sup>rd</sup> quarter of 2020, after correcting for the exception allowed within R 336.1301(1)(a): “one 6 minute average per hour of not more than 27% opacity” and excluding calibration checks, there were 29 exceedances reported. Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11. It should be noted that the BOF and ESP were not in operation until July 27, 2020 of the third quarter.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 3  
January 5, 2021

ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with the AQD rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, the ESP is not being maintained and operated in a satisfactory manner. As such, AK Steel is in violation of MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1, and R 336.1910.

Furthermore, COMS measurements are a direct compliance method for opacity as allowed in R 336.1303 and in the Integrated Iron and Steel MACT. As such, the opacity exceedances as measured by COMS represent violations which are deviations from the ROP requirements. AQD rules R 336.1213(3)(c) and R 336.1213(4)(c) require the reporting of deviations not less than once every 6 months, and annually, and the report to be certified by the facility's responsible official for its truth, accuracy, and completeness after reasonable inquiry. These requirements are also incorporated into the ROP at GCs 19, 21, and 23. None of the exceedances identified in the quarterly COMS reports, starting in the 4<sup>th</sup> quarter of 2015 through the 1<sup>st</sup> quarter of 2020 are included in the semi-annual or annual deviation reports. Therefore, the AQD concludes the Responsible Official failed to submit accurate and complete reports.

Notwithstanding this position, at a minimum, COMS opacity exceedances represent credible evidence and "any other material information" as referenced in 40 CFR 70.6(c)(5)(iii)(B) that are required to be assessed through reasonable inquiry when certifying compliance on a semi-annual and annual basis. However, in each instance where the COMS recorded an opacity exceedance and the facility subsequently determined that the exceedance was not cause by steam interference, the facility failed to take any further action to determine the BOF ESP's compliance with Rule 336.1301. Due to the failure to perform reasonable inquiry, each exceedance represents a violation of Rule 336.1301(1)(a) and should have been reported in the semi-annual and annual deviation reports. Therefore, in this scenario, the AQD also concludes that the Responsible Official failed to submit accurate and complete reports.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by January 26, 2021 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 4  
January 5, 2021

If AK Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katherine Koster". The signature is written in a cursive style with a large, prominent 'K' at the beginning.

Katherine Koster  
Environmental Engineer Specialist  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

August 2, 2022

LaDale Combs, General Manager  
Cleveland Cliffs Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear LaDale Combs:

**VIOLATION NOTICE**

On August 1, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) opacity report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 1<sup>st</sup> quarter of 2022 for Cleveland Cliffs Dearborn Works (Cliffs hereafter) located at 4001 Miller Road, Dearborn, Michigan. Staff reviewed the report to determine Cliffs' compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on review of the aforementioned report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)	The quarterly COMS opacity report for the 1st quarter of 2022 contained 67 exceedances of the 20% 6 minute average opacity limit at the ESP stack.
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1;  R 336.1910	The ESP has ongoing exceedances of the 20% 6 minute average opacity limit as measured and recorded by the COMS.  This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance with the rules and existing law.

LaDale Combs  
Cleveland Cliffs Dearborn Works  
Page 2  
August 2, 2022

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11 state, in part, that a person “shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.”

Cliffs is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, Cliffs is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. For the 1st quarter of 2022, after correcting for the exception allowed within R 336.1301(1)(a): “one 6 minute average per hour of not more than 27% opacity” and excluding calibration checks and concurrent Method 9 readings indicating compliance, there were 67 exceedances reported. Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with the AQD rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, the ESP is not being maintained and operated in a satisfactory manner. As such, Cliffs is in violation of MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1, and R 336.1910.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by August 23, 2022 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If Cliffs believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.



LaDale Combs  
Cleveland Cliffs Dearborn Works  
Page 3  
August 2, 2022

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

*Katherine Koster*

Katherine Koster  
Environmental Engineer Specialist  
Air Quality Division  
313-456-4678

cc: Mary Ann Dolehanty, EGLE  
Annette Switzer, EGLE  
Christopher Ethridge, EGLE  
Brad Myott, EGLE  
Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Jeff Korniski, EGLE  
Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

December 19, 2022

LaDale Combs, General Manager  
Cleveland-Cliffs Steel Corporation Dearborn Works  
4001 Miller Road  
Dearborn, MI 48121-1699

SRN: A8640, Wayne County

Dear LaDale Combs:

### VIOLATION NOTICE

On December 11, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), investigated a complaint about visible emissions from Cleveland-Cliffs Steel Corporation Dearborn Works (Cleveland-Cliffs) located at 4001 Miller Road, Dearborn, Michigan. The purpose of this investigation was to determine Cleveland-Cliffs' compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; the conditions of Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a; and to investigate a complaint received on December 11, 2022, regarding visible emissions attributed to Cleveland-Cliffs' operations.

During the investigation, Jonathan Lamb of the AQD performed Method 9 visible emission (VE) readings of the Basic Oxygen Furnace (BOF) Shop building and noted the following violation:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF Shop building	MI-ROP-A8640-2016a - Section 1, EUBOF, S.C. 1.2;  40 CFR Part 63 Subpart FFFFF, Table 1.12	Visible emissions exceeded 20% over a 3-minute average. The highest 3-minute average was 64.2%

Jonathan Lamb performed Method 9 VE readings of the EUBOF Shop building from approximately 1:43 PM to 2:45 PM on December 11, 2022. During the time period in which the Method 9 readings were performed, the 3-minute average opacity exceeded the 20% opacity limit allowed in ROP No MI-ROP-A8640-2016a – Section 1, EUBOF, Special Condition 1.2 and 40 CFR Part 63 Subpart FFFFF, Table 1.12, a total of five times, with a high of 64.2% from 1:44 PM to 1:46 PM. Copies of the Method 9 VE readings are included with this letter.

LaDale Combs  
Cleveland-Cliffs  
Page 2  
December 19, 2022

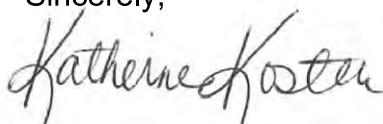
Please initiate actions necessary to correct the cited violation and submit a written response to this Violation Notice by January 9, 2023 (which coincides with 21 calendar days from the date of this letter). The written response should include: the date the violation occurred; an explanation of the causes and duration of the violation; whether the violation is ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violation and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If Cleveland-Cliffs believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violation cited above. If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Katie Koster  
Senior Environmental Engineer  
Air Quality Division  
313-418-0715

Enclosure

cc: Annette Switzer, EGLE  
Christopher Ethridge, EGLE  
Brad Myott, EGLE  
Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Jeff Korniski, EGLE  
Jonathan Lamb, EGLE

**FGBOFSHOP Roof Monitor Opacity Emissions**

**Exceeding 15% Opacity Limit  
(October 15, 2015 – November 9, 2022)**

<b>Date</b>	<b>Start Time</b>	<b>Opacity (Avg.)</b>	<b>Duration of Violation</b>	<b>Duration of Violation</b>
10/15/2015	8:51:45	16%	3-minutes	FGBOF Roof Monitor
10/15/2015	8:51:45	16%	3-minutes	FGBOF Roof Monitor
4/23/2016	7:18:45	16%	3-minutes	FGBOF Roof Monitor
10/4/2016	9:53:45	16%	3-minutes	FGBOF Roof Monitor
11/4/2016	9:01:30	16%	3-minutes	FGBOF Roof Monitor
7/27/2017	10:08:15	19%	3-minutes	FGBOF Roof Monitor
7/27/2017	10:11:15	17%	3-minutes	FGBOF Roof Monitor
8/16/2017	9:40:15	17%	3-minutes	FGBOF Roof Monitor
8/16/2017	11:06:45	19%	3-minutes	FGBOF Roof Monitor
2/1/2018	11:10:45	16%	3-minutes	FGBOF Roof Monitor
2/21/2018	9:46:00	17%	3-minutes	FGBOF Roof Monitor
7/23/2018	14:20:00	16%	3-minutes	FGBOF Roof Monitor
7/23/2018	14:23:00	15%	3-minutes	FGBOF Roof Monitor
9/13/2018	10:41:00	16%	3-minutes	FGBOF Roof Monitor
2/8/2019	9:33:00	16%	3-minutes	FGBOF Roof Monitor
2/8/2019	10:41:00	16%	3-minutes	FGBOF Roof Monitor
2/20/2019	9:22:00	16%	3-minutes	FGBOF Roof Monitor
2/28/2019	15:43:00	17%	3-minutes	FGBOF Roof Monitor
5/14/2019	8:29:00	16%	3-minutes	FGBOF Roof Monitor
5/14/2019	8:32:45	17%	3-minutes	FGBOF Roof Monitor
7/1/2019	14:16:30	16%	3-minutes	FGBOF Roof Monitor
7/1/2019	14:19:30	16%	3-minutes	FGBOF Roof Monitor
12/23/2019	12:26:15	16%	3-minutes	FGBOF Roof Monitor
1/30/2020	10:00:00	16%	3-minutes	FGBOF Roof Monitor
9/22/2020	9:14:15	16%	3-minutes	FGBOF Roof Monitor
3/03/2021	9:42:45	16%	3-minutes	FGBOF Roof Monitor
10/27/21	10:09:30	25%	3-minutes	FGBOF Roof Monitor
10/27/21	10:12:30	52%	3-minutes	FGBOF Roof Monitor
11/9/21	10:46:45	16%	3-minutes	FGBOF Roof Monitor
2/7/22	13:36:00	16%	3-minutes	FGBOF Roof Monitor
11/9/22	9:22:30	16%	3-minutes	FGBOF Roof Monitor

**EUBOF Roof Monitor Opacity Emissions**  
**Exceeding 20% Opacity Limit**  
**(February 1, 2016 – January 26, 2023)**

<b>Date</b>	<b>Start Time</b>	<b>Opacity (Avg.)</b>	<b>Duration of Violation</b>	<b>Source</b>
2/1/2016	9:06:30	22%	3-minutes	EUBOF Roof Monitor
3/21/2016	9:28:30	21%	3-minutes	EUBOF Roof Monitor
5/16/2016	9:00:30	21%	3-minutes	EUBOF Roof Monitor
6/30/2016	13:35:00	22%	3-minutes	EUBOF Roof Monitor
11/4/2016	9:52:15	22%	3-minutes	EUBOF Roof Monitor
11/4/2016	9:55:15	23%	3-minutes	EUBOF Roof Monitor
4/13/2017	11:07:45	21%	3-minutes	EUBOF Roof Monitor
6/12/2017	7:47:45	22%	3-minutes	EUBOF Roof Monitor
7/27/2017	10:08:30	22%	3-minutes	EUBOF Roof Monitor
8/16/2017	11:07:00	22%	3-minutes	EUBOF Roof Monitor
2/20/2019	9:22:30	23%	3-minutes	EUBOF Roof Monitor
2/28/2019	15:43:15	22%	3-minutes	EUBOF Roof Monitor
5/14/2019	9:22:00	24%	3-minutes	EUBOF Roof Monitor
7/1/2019	14:17:00	23%	3-minutes	EUBOF Roof Monitor
2/5/2020	9:11:30	23%	3-minutes	EUBOF Roof Monitor
2/5/2020	9:14:30	36%	3-minutes	EUBOF Roof Monitor
6/4/2021	14:44:15	22%	3-minutes	EUBOF Roof Monitor
6/4/2021	14:47:15	23%	3-minutes	EUBOF Roof Monitor
6/04/2021	14:50:15	19%	3-minutes	EUBOF Roof Monitor
8/18/2021	9:09:15	16%	3-minutes	EUBOF Roof Monitor
9/1/2021	14:16:00	21%	3-minutes	EUBOF Roof Monitor
10/27/21	10:09:30	25%	3-minutes	EUBOF Roof Monitor
10/27/21	10:12:30	52%	3-minutes	EUBOF Roof Monitor
1/26/23	9:52:00	21%	3-minutes	EUBOF Roof Monitor

## APPENDIX G

### SUPPLEMENTAL ENVIRONMENTAL PROJECT

#### South Dearborn Neighborhood Residential Indoor Air Quality Project

##### I. DESCRIPTION

The purpose of the South Dearborn Neighborhood Residential Indoor Air Quality Project (“Project”) is to improve indoor air quality in residential dwellings in the geographic area of the City of Dearborn depicted in Exhibit 1 (“South Dearborn”). The Project includes two components: (1) the purchase and delivery of one air purifier unit to each residential dwelling in South Dearborn; and (2) educational outreach on the benefits of improved indoor air quality. The Project will benefit residents of South Dearborn by improving indoor air quality through the capturing of indoor airborne particles such as dust, pollen, pet dander and mold spores.

Cleveland-Cliffs Steel Corporation (“Defendant”) worked closely with a neighborhood association, Concerned Residents for South Dearborn (“CRSD”), and others in the community in developing the Project. Defendant, working with CRSD, identified approximately 1,117 residential dwellings (*e.g.*, houses and apartments) in South Dearborn for which Defendant will purchase and deliver air purifier units under the Project. Defendant plans to use CRSD as Defendant’s contractor to purchase and deliver the air purifier units and to conduct the educational outreach on the benefits of improved indoor air quality.

##### II. SCOPE OF WORK

1. Defendant shall purchase and deliver a home air purifier to each of the approximately 1,117 residential dwellings in South Dearborn. The model of air purifier unit shall meet the minimum specifications of (1) including a HEPA filter; (2) ability to purify a room of 300 square feet; (3) ability to filter volatile organic compounds (VOCs); and (4) capability to filter 99.0% or more allergens. An example includes the “Honeywell True HEPA Large Room Air Purifier with Allergen Remover, HPA 200” or a similar type. If Defendant has made reasonable efforts to deliver a unit to a residential dwelling (including multiple delivery attempts) but delivery has been unsuccessful, then Defendant shall return the unit and obtain a refund of the purchase price, which shall be paid to the General Fund of the State of Michigan pursuant to Section IV (Estimated Cost and Actual Cost) below.

2. Defendant shall conduct educational outreach in South Dearborn on the benefits of improved indoor air quality, including:

- Disseminating information packets (*e.g.*, flyers) on air quality, the importance of purifying the air inside the home, and the type, function, and maintenance of the air purifier unit. Dissemination of information packets shall occur in at least two rounds. The first round of information packets shall be distributed before delivery of air purifier units and a second round shall be distributed concurrent with or after delivery of air purifier units.

- Conducting at least two educational presentations on air quality, the importance of purifying the air inside the home, and the type, function, and maintenance of the air purifier unit. These presentations may be in-person or virtual.

3. Defendant shall maintain copies of receipts and delivery notices for each purchased and delivered air purifier, and receipts and invoices on the educational outreach.

4. Reporting

Defendant shall provide quarterly Project status reports to EGLE within 30 days after the conclusion of each calendar quarter, starting after the Effective Date of the Consent Decree Modification. The Project status reports shall include the following: (1) number of air purifiers ordered, along with supporting documentation; (2) number of air purifiers delivered, along with supporting documentation; (3) expenses incurred for purchase and delivery of air purifiers, along with supporting documentation; (4) a summary of any implemented educational component, along with copies of any prepared written material.

Defendant shall provide quarterly Project status reports until completion of the Project. At that time, Defendant shall provide a SEP Completion Report in accordance with the Consent Decree Modification.

### **III. SCHEDULE**

Defendant shall complete the Project within one year of the Effective Date of this Consent Decree Modification.

### **IV. ESTIMATED COST AND ACTUAL COST**

The estimated cost of the Project consists of the following:

Air purifier units: approximately \$225 per unit x approximately 1,117 housing units = \$251,000  
Educational outreach: approximately \$3,000

If the actual cost to implement the Project is less than \$244,000, then Defendant shall pay to the General Fund of the State of Michigan, pursuant to Paragraph 3 of the Consent Decree Modification, the difference between \$244,000 and the actual cost to implement the Project. Defendant shall make the payment within 30 days after completion of the Project.

**Exhibit 1**  
**to Appendix G – Supplemental Environmental Project**





# **Exhibit 1**

UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

---

UNITED STATES OF AMERICA )  
and the MICHIGAN DEPARTMENT )  
OF ENVIRONMENTAL QUALITY, )  
Plaintiffs, )  
v. )  
AK STEEL CORPORATION, )  
Defendant. )

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Civil Action No. 15-cv-11804

**CONSENT DECREE**

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## I. INTRODUCTION

A. Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“EPA”), has filed a complaint in this action concurrently with this Consent Decree, alleging that Defendant, AK Steel Corporation, violated regulations that EPA has approved under Sections 110, 112 and 502 of the Clean Air Act (“Act”), 42 U.S.C. §§ 7410, 7412 and 7661a.

B. The Michigan Department of Environmental Quality (“MDEQ”) filed the Complaint as a co-plaintiff, alleging all of the claims made by the United States and also alleging that Defendant violated Rule 901 of Michigan’s Air Pollution Control Rules, 2002 A.A.C.S., R 336.1901 (“Michigan Regulation 336.1901”).

C. The Complaint alleges, *inter alia*, that during the past five years, the Defendant’s steel manufacturing facility, located at 4001 Miller Road in Dearborn, Wayne County, Michigan (the “Facility”), has emitted pollutants into the air from various emission sources in amounts that exceed limits established by the Michigan State Implementation Plan (“Michigan SIP”) and similar limits set forth in the Facility’s Renewable Operating Permit issued pursuant to Title V of the Act. In addition, the Complaint alleges that Defendant failed to operate, maintain and monitor certain processes at the Facility in violation of the National Emission Standards for Hazardous Air Pollutants (“NESHAP”) for the Integrated Iron and Steel Industry, 40 C.F.R. Part 63, Subpart FFFFF.

D. Between August 12, 2008 and the date of lodging of this Consent Decree, MDEQ and EPA issued various notices to Defendant alleging violations of Michigan and federal laws related to certain air emissions from the Facility. A complete list of these notices is attached hereto as Appendix A to this Consent Decree.

E. Defendant does not admit any liability arising out of the transactions or occurrences alleged in the Complaint.

F. This Consent Decree is intended to represent a comprehensive resolution of the claims alleged in the Complaint and the claims resolved through Section XIV (Effect of Settlement/Reservation of Rights) and to ensure that when the compliance measures required by this Decree have been fully implemented, the facility will be operated and maintained to prevent a recurrence of the violations alleged in the Complaint and the violations resolved through Section XIV (Effect of Settlement/Reservation of Rights).

G. EPA, MDEQ and Defendant (the “Parties”) recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section II, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

## II. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345 and 1355; and Sections 113(b) and 304(a) of the Act, 42 U.S.C. §§ 7413(b) and 7604(a), and over the Parties. This Court has supplemental jurisdiction over the state law claims asserted by MDEQ pursuant to 28 U.S.C. § 1367. Venue lies in this District pursuant to 28 U.S.C. §§ 1391(b) and 1395(a) and Section 113(b) of the Act, 42 U.S.C. § 7413(b), because the Defendant resides and is found in this District and because the violations alleged in the Complaint are alleged to have occurred within this District. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Section 113 of the Act, 42 U.S.C. § 7413, and Section 5530 of Michigan's Natural Resources and Environmental Protection Act, M.C.L. § 324.5530.

## III. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States and MDEQ, and upon Defendant and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of this Consent Decree are implemented. At least 30 Days prior to such transfer, Defendant shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to EPA Region 5, the United States Attorney for the Eastern District of Michigan, the United States Department of Justice, and MDEQ in accordance with Section XVII (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Decree.

5. Defendant shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. Defendant shall condition any such new contract, and any pending contract that can be modified, upon performance of the work in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Defendant shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

#### IV. DEFINITIONS

7. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

“Act” shall mean the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*

“Basic Oxygen Furnace” or “BOF” shall mean the two 250-ton vessels at the Facility where molten iron and scrap steel are converted into molten steel through the use of high purity oxygen blowing.

“Complaint” shall mean the complaint filed by the United States and MDEQ in this action.

“Consent Decree” or “Decree” shall mean this Decree and all appendices attached hereto (listed in Section XXV).

“Continuous Opacity Monitor” or “COM” shall mean the automated monitor of opacity readings from the ESP stack at the Facility.

“Day” shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.

“Defendant” shall mean AK Steel Corporation.

“Environmental Management System” or “EMS” shall mean a management system providing the structure by which specific activities related to environmental protection and compliance can be effectively and efficiently carried out by Defendant at the Facility, which shall address, at a minimum: (1) the requirements of this Consent Decree (including but not limited to (i) protocols for ESP inspections, (ii) specifications for the annual training required by Paragraph 19.c, and (iii) a framework and set of requirements for environmental organizational management and management notification of environmental violations); and (2) the 12 EMS elements in Appendix B.

“EMS Audit” shall mean the audit conducted by the EMS Auditor pursuant to Paragraph 17 of this Consent Decree.

“EMS Auditor” shall mean SRI Quality System Registrar or other independent third party meeting the requirements of Paragraph 16 who is approved by EPA, in consultation with MDEQ, and contracted by Defendant to perform the duties set forth in Paragraph 17, including an evaluation of the adequacy of EMS implementation relative to the EMS Manual.

“EMS Audit Findings” shall mean a written summary of all instances of nonconformance with the EMS Manual noted during the EMS Audit, and all areas of concern identified during the course of that audit which, in the EMS Auditor’s judgment, merit further review or evaluation for potential EMS, environmental, or regulatory impacts.

“EMS Audit Report” shall mean a report setting forth the EMS Audit Findings resulting from the EMS Audit, which meets all of the requirements of Paragraph 17.b.

“EMS Audit Response and Action Plan” shall mean a comprehensive plan for bringing the Facility into full conformance with the EMS Manual and fully addressing all EMS Audit Findings identified in the EMS Audit Report.

“EMS Manual” shall mean the document created by the Defendant that has been approved by EPA, in consultation with MDEQ, which describes and documents the integrated EMS developed by Defendant for the Facility and contains an EMS implementation schedule.

“EPA” shall mean the United States Environmental Protection Agency.

“Effective Date” shall have the definition provided in Section XVII.

“Electrostatic Precipitator” or “ESP” shall mean the primary particulate emissions control equipment for the BOF and located west of the building containing the BOF.

“Facility” shall mean Defendant’s steel plant located in Dearborn, Michigan.

“ISO 14001” shall mean the International Standard for environmental management systems, reference number ISO 14001:2004(E), unless such version has been superceded by an updated version adopted by ISO, in which case the updated version applies.

“MDEQ” shall mean the Michigan Department of Environmental Quality.

“O&M Plan” shall mean the Operations & Maintenance Plan for the ESP, attached hereto as Appendix C, that sets forth operating parameters and maintenance procedures

for key and auxiliary equipment associated with the waste-gas cleaning system for the ESP.

“Paragraph” shall mean a portion of this Decree identified by an arabic numeral.

“Parties” shall mean the United States, MDEQ, and Defendant.

“Section” shall mean a portion of this Decree identified by a roman numeral.

“United States” shall mean the United States of America, acting on behalf of EPA.

“BOF Shop” shall mean the structure identified in the Facility’s Renewable Operating Permit as FGBOFSHOP and containing the emission units identified as EUBOF and EURELADLINGBOF.

“Business Day” shall mean any Monday, Tuesday, Wednesday, Thursday, and Friday, but not including any federal or State holiday.

“Calendar Week” shall mean the seven-day period starting on Monday and ending on Sunday.

“Casing” shall mean two Compartments of the ESP contained within a single metal shell except for the new Casing added during Phase I of the ESP Project that contains only a single Compartment.

“Compartment” shall mean a vertical chamber containing the Fields, collection plates, rappers, and other components used to charge, collect, and remove particulate matter from BOF emissions.

“Consent Decree Modification” shall mean the First Material Modification to the Consent Decree.

“Consent Decree” or “Decree” shall mean the Consent Decree entered in this action on August 21, 2015 and all Appendices attached thereto (as listed in Section XXV), as modified by the Consent Decree Modification. In the event of a conflict between the Decree and any Appendix, the Decree shall control.

“Effective Date of the Consent Decree Modification” shall mean the date upon which the First Material Modification to the Consent Decree is entered by the Court or a Motion to Enter the Consent Decree Modification is granted, whichever occurs first, as recorded on the Court’s docket.

“ESP Project” shall mean the ESP project set forth in Paragraph 4 of the Consent Decree



Modification.

“Field” shall mean one of several electrical fields in a Compartment that negatively charges PM. The four replaced Casings each have two Compartments containing five Fields in each Compartment. The new Casing built during Phase I has only one Compartment containing six larger Fields designed to provide the same level of control as each of the four replaced Casings. Thus, while the ESP will contain 46 Fields upon completion of the ESP Project, it will contain 50 “Equivalent ESP Fields.”

“MDEQ” and “EGLE” shall both mean the Michigan Department of Environment, Great Lakes, and Energy.

“Operating Standard” shall mean the number of Equivalent ESP Fields operating during a compliant performance test conducted pursuant to Paragraph 22.2.a.

“PM” shall mean particulate matter.

“Reference Method 9C” or “EPA Method 9” shall mean the visible emissions test method currently described, respectively, in Mich. Admin. Code R. 336.2032 or in 40 C.F.R. Part 60, Appendix A.

“Renewable Operating Permit” shall mean the permit issued to the Facility by EGLE, pursuant to Title V of the CAA, 42 U.S.C. § 7661 *et seq.*, and Mich. Admin. Code R. 336.1210, including any revisions thereto and renewals.

“Steel Production Cycle” shall mean the operations conducted within the BOF Shop that are required to produce each batch of steel, including scrap charging, preheating, hot metal charging, primary oxygen blowing, sampling (vessel turn-down and turn-up), additional oxygen blowing, tapping, and deslagging. The Steel Production Cycle begins when the scrap is charged to the furnace and ends 3 minutes after the slag is emptied from the vessel into the slag pot.

“Visible Emission Standard” shall mean a visible emission of a density greater than a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity, and excluding visible emissions due to uncombined water vapor, pursuant to Mich. Admin. Code, R 336.1301 and General Condition 11 of the Facility’s Renewable Operating Permit.

## V. CIVIL PENALTY

8. Within 30 Days after the Effective Date, Defendant shall pay the sum of \$1,353,126 as a civil penalty, together with interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

9. Defendant shall pay half of the civil penalty due under the preceding Paragraph (\$676,563) at <https://www.pay.gov> to the U.S. Department of Justice account, in accordance with instructions provided to Defendant by the Financial Litigation Unit (“FLU”) of the United States Attorney’s Office for the Eastern District of Michigan after the Effective Date. The payment instructions provided by the FLU shall include a Consolidated Debt Collection System (“CDCS”) number, which Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Joseph C. Alter  
Vice President, General Counsel and  
Chief Compliance Officer  
AK Steel Corporation  
9227 Centre Pointe Drive  
West Chester, Ohio 45069  
[joe.alter@aksteel.com](mailto:joe.alter@aksteel.com)  
(513) 425-5000

on behalf of Defendant. Defendant may change the individual to receive payment instructions on their behalf by providing written notice of such change to the United States and EPA in accordance with Section XVII (Notices). At the time of payment, Defendant shall send notice that payment has been made to: (i) EPA via email at [acctsreceivable.cinwd@epa.gov](mailto:acctsreceivable.cinwd@epa.gov) or via regular mail at EPA Cincinnati Finance Office, 26 Martin Luther King Drive, Cincinnati, Ohio 45268; and (ii) the United States via email or regular mail in accordance with Section XVI. Such notice shall reference the CDCS Number and DOJ case number 90-5-2-1-10702.

10. Defendant shall not deduct any penalties paid under this Decree pursuant to this Section or Section X (Stipulated Penalties) in calculating its federal, state or local income tax.

11. Within 30 Days after the Effective Date, Defendant shall pay the remaining half of the civil penalty (\$676,563) to the General Fund of the State of Michigan in the form of a check made payable to the “State of Michigan” and mailed to the Michigan Department of Environmental Quality, Accounting Services Division, Cashier’s Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments made to the State of Michigan pursuant to this Consent Decree shall include “Payment Identification Number AQD40081” on the front of the check and/or in the cover letter with the payment.

11.1 Within 30 Days after the Effective Date of this Consent Decree Modification, Defendant shall pay a civil penalty for the violations identified in Appendix F of \$81,380 to the General Fund of the State of Michigan in the form of a check made payable to the “State of Michigan” and mailed to the Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier’s Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments made to the State of Michigan pursuant to this Consent Decree shall include “Payment Identification Number AQD40291” on the front of the check and/or in the cover letter with the payment.

## VI. COMPLIANCE REQUIREMENTS

### ~~A. ENVIRONMENTAL MANAGEMENT SYSTEM~~

~~12. Preparation of EMS Manual. Within eight (8) months of the Effective Date, Defendant shall draft and submit to EPA and MDEQ an EMS Manual which describes and documents the integrated EMS developed for the Facility and contains an EMS implementation schedule for all portions of the Facility containing emission sources referenced in a violation notice or notice of violation listed in Appendix A.~~

~~a. The EMS Manual shall (i) describe or contain, as appropriate, overarching policies, procedures, and programs that compose the EMS framework, and respective management systems, subsystems, and tasks for the elements listed in Appendix B, and (ii) describe specific procedures for implementing the requirements of this Consent Decree, including but not limited to (1) protocols for ESP inspections; (2) specifications for the annual training required by Paragraph 19.c, and (3) a framework and set of requirements for environmental organizational management and management notification of environmental violations.~~

~~b. If EPA, after consultation with MDEQ, determines that the EMS Manual or any revision thereof pursuant to Paragraph 14 fails to comply with the requirements of 12.a, then EPA, in consultation with MDEQ, will send Defendant a written notification of its determination within 60 days of receipt of the initial EMS Manual or any subsequent revision found deficient. Defendant must correct the deficiencies found within 30 days, unless the issue is submitted to dispute resolution.~~

~~13. Upon Defendant's receipt of EPA's approval of the EMS Manual, Defendant shall commence implementation of the EMS in accordance with the schedule contained in the EMS Manual.~~

~~14. Revisions of the EMS Manual. Any material revisions to the EMS Manual subsequent to its initial approval must be submitted to EPA for review and approval, in consultation with MDEQ.~~

~~15. EMS Audits. In accordance with the procedure set forth in Paragraph 16, Defendant shall hire an EMS Auditor to conduct an EMS Audit pursuant to Paragraph 17. Defendant shall bear all costs associated with the EMS Auditor, cooperate fully with the EMS Auditor, and provide the EMS Auditor with access to all records, employees, contractors, and areas of the Facility that the EMS Auditor deems reasonably necessary to effectively perform the duties described in Paragraph 17.~~

~~16. Selection of EMS Auditor. Defendant shall retain SRI Quality System Registrar to act as the EMS Auditor for the purposes of this Consent Decree, or shall select an alternate~~

~~auditor in accordance with this Paragraph. If Defendant elects to select an alternate auditor, Defendant shall propose to EPA and MDEQ for approval a proposed alternate EMS Auditor who meets the qualification requirements of ISO 14001 and has expertise and competence in the regulatory programs under federal and state environmental laws. The proposed alternate EMS Auditor must have no direct financial stake in the outcome of the EMS Audit conducted pursuant to this Consent Decree. Defendant shall disclose to EPA and MDEQ any past or existing contractual or financial relationships when the proposed alternate EMS Auditor is identified.~~

~~a. EPA, in consultation with MDEQ, shall notify Defendant of whether it approves the proposed alternate EMS Auditor. If EPA, after consultation with MDEQ, does not approve the proposed alternate EMS Auditor, then Defendant shall submit another proposed alternate EMS Auditor to EPA and MDEQ within 30 Days of receipt of EPA's written notice. If after Defendant has submitted a second proposed alternate EMS Auditor, which must be submitted within 30 Days of receipt of written notice that EPA has not approved the second proposed auditor, the Parties are unable to agree on an EMS Auditor, the Parties agree to resolve the selection of the alternate EMS Auditor through the Dispute Resolution process in Section XII.~~

~~b. Within 10 Days of the date that EPA notifies Defendant of the approval of the proposed alternate EMS Auditor, Defendant shall retain the proposed alternate EMS Auditor, thereafter designated the "EMS Auditor," to perform an EMS Audit as further described in Paragraph 17 below.~~

~~17. Duties of the EMS Auditor. Defendant shall direct the EMS Auditor to perform the following duties:~~

~~a. The EMS Auditor shall perform an initial EMS Audit of the Defendant's EMS regarding the first six (6) months of implementation of the EMS. After the initial EMS Audit, Defendant shall conduct an EMS Audit once every six (6) calendar months. The scope of these EMS Audits shall be consistent with an ISO 14001 certification audit, recertification audit, or surveillance audit, as applicable based on the timing of the audit.~~

~~Each EMS Audit shall evaluate the adequacy of EMS implementation at the Facility as it relates to air emissions and identify areas of concern, from top Facility management down, throughout each major organizational unit with responsibilities under the EMS. Each EMS Audit shall be conducted in accordance with ISO 14001, and shall determine the following:~~

- ~~(i) Whether there is a defined system, subsystem, program, or planned task for the respective EMS element;~~
- ~~(ii) To what extent the system, subsystem, program, or task has been implemented, and is being maintained;~~

- ~~(iii) — The adequacy of the Facility’s internal self-assessment procedures for programs and tasks composing the EMS, including but not limited to a review of the Defendant’s conformance with processes and procedures to achieve the target objective of zero opacity exceedances at the BOF ESP;~~
- ~~(iv) — Whether Defendant is effectively communicating environmental requirements to affected parts of the organization, or those working on behalf of the organization;~~
- ~~(v) — Whether written targets, objectives, and action plans for improving environmental performance are being achieved. Targets and objectives must include actions that reduce the risk of non-compliance with environmental requirements and minimize the potential for unplanned or unauthorized releases of hazardous or harmful contaminants.~~
- ~~(vi) — Whether further improvements should be made to the EMS; and~~
- ~~(vii) — Whether there are nonconformances from Defendant’s written requirements or procedures.~~

~~b. — The EMS Auditor shall develop an EMS Audit Report. Within 45 Days following the six month period that is the subject of the initial and each subsequent EMS Audit, the Defendant shall submit the EMS Audit Report to EPA and MDEQ. Each EMS Audit Report shall contain: (i) a summary of the audit process, including any obstacles encountered; (ii) detailed EMS Audit Findings, including the basis for each finding and each area of concern identified; (iii) identification of any EMS Audit Findings corrected or areas of concern addressed during the audit; (iv) recommendations for resolving any area of concern or otherwise achieving full implementation of the EMS Manual; and (v) a certification by the Defendant that the EMS Audit was conducted in accordance with the provisions of this Decree. Each EMS Audit Report after the initial EMS Audit Report may reference portions of prior EMS Audit Reports in the event there has been no intervening change in that portion.~~

~~18. — Follow-Up Corrective Measures. Within 45 Days of receiving each EMS Audit Report, Defendant shall submit to EPA and MDEQ for review and approval a report responding to the EMS Audit Findings and areas of concern identified in each EMS Audit Report and providing an action plan for expeditiously coming into full conformance with the provisions in the EMS (the “Audit Response and Action Plan”). Each Audit Response and Action Plan shall include the result of any root cause analysis, specific deliverables, responsibility assignments, and an implementation schedule for the identified actions and measures, including those that may have already been completed. Defendant may implement any Audit Response and Action Plan items prior to receiving EPA comment, but shall address any such comments in accordance with Paragraph 18.a, unless the issue is submitted to Dispute Resolution.~~

~~a. EPA, after consultation with MDEQ, will have 45 days from its receipt of the Audit Response and Action Plan from Defendant to provide comments on the Audit Response and Action Plan. If any comments are provided by EPA, Defendant shall, within 30 Days of receipt of EPA's comments, submit to EPA a final Audit Response and Action Plan responding to and addressing EPA's comments. If no comments are provided by EPA within 45 days of receiving the Audit Response and Action Plan, then the version of the EMS Audit Report provided pursuant to Paragraph 17 as modified by the respective Audit Response and Action Plan shall be deemed the final version. Defendant shall have the right to submit any issues to Dispute Resolution. If any issues are submitted to Dispute Resolution, Defendant shall submit a timely final Audit Response and Action Plan that responds to all issues not subject to Dispute Resolution.~~

~~b. After making any necessary modifications to each Audit Response and Action Plan based on EPA comments, if any, Defendant shall implement each final Audit Response and Action Plan in accordance with the schedules set forth therein.~~

## B. ELECTROSTATIC PRECIPITATOR

### 19. O&M Plan.

a. Commencing no later than 30 days after the Effective Date of this Consent Decree, Defendant shall comply with the requirements set forth in the Operations & Maintenance Plan for the ESP ("O&M Plan"), attached hereto as Appendix C;

b. At least once per calendar year, but as frequently as necessary, Defendant shall review the O&M Plan to determine if any updates are necessary to maintain the effectiveness of all key and auxiliary equipment associated with the ESP. Defendant shall submit any updates to the O&M Plan to EPA. If EPA, after consultation with MDEQ, disagrees with any such updates, then EPA, in consultation with MDEQ, will send Defendant a written notification describing the disagreement within 60 days of receipt of Defendant's updates. Defendant may implement any O&M Plan updates, but shall discontinue any such updates in the event of EPA disagreement, unless the issue is submitted to dispute resolution; and

c. Once per calendar year, Defendant shall provide refresher training on the requirements of the O&M Plan to relevant personnel.

20. Defendant's Review of Continuous Opacity Monitoring (COM) data. By the 30th Day after each calendar quarter (April 30, July 30, October 30 and January 30) Defendant shall submit a quarterly report that includes each instance in which the 6-minute block average reading of the COM data for the ESP exceeds 20% opacity. For each instance, Defendant shall:

a. Identify the root cause of each instance in which the 6-minute block average reading exceeds 20% opacity;

b. When the root cause is unknown, provide a description of efforts taken by Defendant to investigate the root cause of each 6-minute block average reading that exceeds 20% opacity, including a copy of any related ESP operating records;

c. Describe corrective actions taken in response to the root cause of each instance in which the 6-minute block average reading exceeds 20% opacity, including but not limited to a copy of related work orders or other documents submitted to address the cause of the high reading, if any; and

d. Describe preventative actions taken, if any, and actions to be taken, if any, by Defendant to eliminate such instances of 6-minute block average readings that exceed 20% opacity in the future, along with a proposed schedule for taking such corrective action, or, alternatively, a justification for taking no additional action to address such instances.

21. Defendant's Annual Inspection of the ESP. Within one year of the Effective Date and once per calendar year thereafter until termination of the Consent Decree, Defendant shall hire a third party consultant to conduct an inspection of the ESP. This inspection shall include a detailed and thorough evaluation of the ESP Chambers 1-8, the rapper system and the off-gas conditioning system and make recommendations for repair or improvement of operation, where appropriate. Within 60 days of receiving the report resulting from this inspection, Defendant shall provide to EPA and MDEQ the inspection report and Defendant's analysis of the report's findings and steps taken, if any, and steps to be taken, if any, for repair or improvement of operation of the ESP with a timely schedule for implementation. If any deficiency in maintenance is identified, Defendant shall address such deficiency, if necessary, in updates to the O&M Plan under Paragraph 19(b).

22. EPA's Review of Defendant's Future Corrective Action. If EPA, after consultation with MDEQ, disagrees with any portion of Defendant's conclusions concerning the recommendations for repair or improvement of ESP operation contained in the annual inspection report required by Paragraph 21, or actions planned or not planned to address exceedances reported in Paragraph 20.d, then EPA, in consultation with MDEQ, will send Defendant a written notification describing the disagreement within 60 days of receipt of Defendant's conclusions. If Defendant objects to any modified or additional corrective action required by EPA, it may dispute EPA's determination pursuant to Section XII (Dispute Resolution). If no dispute is initiated, Defendant shall carry out the corrective action sought by EPA.

22.1. ESP Project. Defendant shall install a new ESP Casing that consists of a single Compartment that has the same air handling capacity and pollution control efficiency as an existing ESP Casing, and is otherwise functionally equivalent to or greater than the design standards of two current Compartments. Defendant shall also replace each of its four existing ESP Casings, including their Compartments. The installation of the new Casing and the replacement of the four existing ESP Casings will be carried out in five phases, one for each

Casing. Defendant shall complete each phase of the ESP Project in accordance with the following schedule:

<u>ESP Project Phase</u>	<u>Completion Date</u>
<u>I. Install new ESP Casing</u>	<u>June 24, 2021</u>
<u>II. Replace one existing ESP Casing</u>	<u>Nov. 30, 2021</u>
<u>III. Replace a second existing ESP Casing</u>	<u>May 31, 2022</u>
<u>IV. Replace a third existing ESP Casing</u>	<u>October 25, 2022</u>
<u>V. Replace a fourth existing ESP Casing</u>	<u>March 31, 2023</u>

22.2.

a. Establishment of Operating Standard: Within 60 Days after the completion of the ESP Project as outlined in Paragraph 22.1, Defendant shall complete performance testing at the ESP stack to demonstrate compliance with applicable standards for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, lead (Pb), manganese (Mn), and visible emissions. The number of Equivalent ESP Fields used during this testing shall serve as the ESP's Operating Standard. Unless otherwise specified herein, all future performance tests conducted pursuant to this Consent Decree will be conducted while operating the same number of Equivalent ESP Fields as the Operating Standard. Testing for Pb and Mn shall be performed in accordance with EPA Method 29 and shall include testing of the ESP stack and the secondary baghouse stack. Testing for visible emissions at the ESP stack shall be performed in accordance with EPA Method 9 and shall be conducted during a minimum of three Steel Production Cycles and for a minimum of 180 minutes in duration.

b. Testing Protocol: Defendant shall submit to EPA and EGLE a test protocol at least 60 Days prior to the test date required in Paragraph 22.2.a. EPA, after consulting with EGLE, may either approve the submission or decline to approve it and provide written comments. Within 10 Days of receiving EPA's written comments, Defendant shall either: (1) alter the submission consistent with EPA's written comments and provide the submission to EPA for final approval, or (2) submit the matter for dispute resolution under Section XII of the Consent Decree. After approval of the performance test protocol, all subsequent performance tests required by this Consent Decree may be conducted pursuant to the approved protocol, respectively, except as provided for in Paragraph 22.2.c, below. Defendant shall provide notice of the performance test date or dates at least 30 Days prior to the commencement of the performance test and shall: (1) affirm that the performance test will be conducted according to the approved performance test protocol; and (2) identify which Fields will operate during the performance test.



Unless otherwise specified herein, all subsequent performance tests required by this Consent Decree must be conducted using a different combination of Fields. The test results shall be submitted to EPA and EGLE no later than 60 Days after completion of each test.

c. Revising Testing Protocol: If Defendant elects to conduct a performance test under a different protocol or EPA test method, or with a different vendor from a protocol/vendor previously approved under Paragraph 22.2.b above, then at least 30 Days prior to conducting such performance test, Defendant shall submit a new protocol to EPA and EGLE for approval.

22.3. Annual Inspections: Annual inspections of all ESP Casings existing as of August 21, 2015 shall continue under Paragraph 21 of this Consent Decree until the ESP Project is complete. The requirements of Paragraph 21 cease upon replacement of the last ESP Casing pursuant to Phase V of the ESP Project.

22.4. Compliance with Emission Limits:

a. On and after the Effective Date of this Consent Decree Modification, Defendant shall comply with the following: (1) the emission limits for the ESP stack contained in the Facility's Renewable Operating Permit for emission unit EUBOF for PM, PM<sub>10</sub>, and PM<sub>2.5</sub>; and (2) the 20% opacity limit for the EUBOF roof monitor and the 15% opacity limit for FGBOFSHOP roof monitor in the Facility's Renewable Operating Permit.

b. On and after the Effective Date of this Consent Decree Modification, Defendant shall also comply with the following: -(1) Visible Emission Standard for the ESP stack contained in General Condition 11 of the Facility's Renewable Operating Permit; and (2) the emission limits for the ESP stack and the secondary baghouse stack contained in the Facility's Renewable Operating Permit for emission unit FGBOFSHOP for Pb and Mn. On and after the completion of the ESP Project and after the establishment of an Operating Standard as defined Paragraph 22.2(a), Defendant shall operate the ESP at the Operating Standard or more during Steel Production Cycles at the BOF Shop. For the purposes of this Consent Decree only, compliance with the Visible Emission Standard shall be determined based on EPA Method 9 observations taken in accordance with Paragraph 22.6. At the same time Defendant submits its quarterly report under Paragraph 22.8(e), Defendant shall report to EPA and EGLE any periods in which the ESP is operating below the Operating Standard when the BOF Shop is operating, including the date, the length of time, and the reason for operating below the Operating Standard.

For purposes other than this Consent Decree, EGLE and EPA reserve their rights to determine compliance with the Visible Emission Standard using EPA Method 9

observations and COM or other credible evidence, and Defendant reserves its right to contest EGLE and EPA's rights to determine compliance using COM or other credible evidence.

22.5.

a. Documentation of Completion of the ESP Project. Defendant shall submit to EPA and EGLE:

- i. As-built general arrangement drawings of the completed ESP within 60 Days after completion of Phase V of the ESP Project;
- ii. A copy of the operation and maintenance plan for the ESP prepared in compliance with the requirements of the Iron and Steel NESHAP at 40 C.F.R. § 63.7800(b) within 30 Days after completion of Phase V of the ESP Project; and
- iii. A copy of the ESP's operating manual within 180 Days after completion of Phase V of the ESP Project.

b. Testing After Completion of the ESP Project. No later than 10 Days after the Effective Date, Defendant shall conduct an initial performance test followed by eight successive performance tests conducted once each calendar quarter with no performance tests conducted closer than two months apart. For the first three performance tests, Defendant shall test the ESP stack for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and visible emissions and the ESP stack and secondary baghouse stack for Pb and Mn. For the following six performance tests, Defendant shall test the ESP stack and the secondary baghouse stack for Pb and Mn. Testing shall be conducted using the same testing methods used in Paragraph 22.2.b or 22.2.c. Defendant shall provide notice of the performance test date or dates at least 30 Days prior to the commencement of the test in which it shall: (1) affirm that the performance test will be conducted according to the approved applicable performance test protocol or submit a new performance test protocol for approval; and (2) identify which Fields will be in operation. The test results shall be submitted to EPA and EGLE no later than 60 Days after completion of each test.

c. Testing the Entire ESP. Within twelve months after completion of the ESP Project, Defendant shall conduct a performance test of the ESP stack for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and visible emissions and of the ESP stack and secondary baghouse stack for Pb and Mn while operating all five Casings with no Fields out of service. Testing shall be conducted using the same testing methods used in Paragraph 22.2.b or 22.2.c. Defendant shall provide notice of the performance test date or dates at least 30 Days prior to the commencement of the test and may be conducted on the same date as another required performance test.

22.6. Visible Emission Measurements. On and after the Effective Date of this Consent Decree Modification, Defendant shall measure the visible emissions at the ESP stack by: (1) conducting EPA Method 9 visible emission observations for at least one Steel Production Cycle per Calendar Week, and (2) measuring 6-minute block averages using COM. If either EPA Method 9 observations or COM data identify an exceedance of the Visible Emission Standard, then Defendant shall, starting no later than the next Business Day that the BOF is operating following the exceedance, increase the frequency of EPA Method 9 observations to two Steel Production Cycles per day on three days over a seven-day period until both COM data and EPA Method 9 observations for the ESP stack show 14 consecutive Days without an exceedance of the Visible Emission Standard. Defendant shall report these measurements and any exceedances on a quarterly basis with the reporting required under Paragraph 20. Any COM data recorded when the COM is undergoing repair or a calibration check shall not be considered in determining the Visible Emission Standard in Section VI.

22.7. BOF Shop Roof Monitor Compliance Measures. On and after the Effective Date of this Consent Decree Modification, Defendant shall comply with the following requirements:

- a. Increased ESP Ductwork Inspections.
  - i. Defendant shall inspect the exterior of the guillotine relief dampers, relief chambers, wye sections, downcomers, and dirty gas main on the ESP on a weekly basis for any exhaust leaks or openings. Records of each inspection, to include the name of the inspector, the time and date of the inspection, and the location of any leak(s) or opening(s), shall be maintained and submitted quarterly to EPA and EGLE.
  - ii. If the inspection identifies any exhaust leak or opening in the guillotine relief dampers, relief chambers, wye sections, downcomers, and/or dirty gas main, repairs shall be initiated. If the exhaust leak(s) or opening(s) is identified during an operating period, temporary repairs shall be completed within twenty-four (24) hours of the identification of the leak(s) or opening(s). If the leak(s) or opening(s) is identified during an outage, repairs shall be completed during the outage.
  - iii. Following completion of either temporary or permanent repairs on an exhaust leak or opening in a guillotine relief damper, relief chamber, wye section, downcomer, or the dirty gas main, visible emissions observations of the FGBOFSHOP roof monitor shall be conducted in accordance with Reference Method 9C for a minimum of two hours which must include two complete Steel Production Cycles. Observations conducted to comply with

Paragraph 22.7.b may also serve to comply with this observation requirement.

b. Additional BOF Shop Roof Monitor VE Observations: Starting with the first full week after the Effective Date of the Consent Decree Modification, Defendant shall increase the number of visible emission observations required pursuant to Paragraph 22 of FGBOFSHOP in the Facility's Renewable Operating Permit from three times per Calendar Week to four times per Calendar Week. All other requirements of Paragraph 22 remain unchanged. If the BOF Shop is not producing steel for more than 24 consecutive hours within a Calendar Week, then the additional fourth visible emission observation is not required for that Calendar Week. If three or fewer exceedances of the FGBOFSHOP roof monitor opacity limit of 15% occur for 180 consecutive days, then Defendant can terminate the additional fourth visible emission observation.

### C. FUGITIVE DUST EMISSIONS

#### 23. Fugitive Dust Control Plan for Slag Handling.

a. Commencing no later than 30 days after the Effective Date of this Consent Decree, Defendant shall comply with the requirements set forth in the Fugitive Dust Control Plan for Slag Handling ("Fugitive Dust Plan"), attached hereto as Appendix D;

b. At least once per calendar year, Defendant shall review the Fugitive Dust Plan to determine if any updates are necessary to maintain the effectiveness of all key and auxiliary equipment. Defendant shall submit any updates to the Fugitive Dust Plan to MDEQ for approval. Defendant may implement any Fugitive Dust Plan updates prior to receiving MDEQ approval, but shall discontinue any such updates in the event of MDEQ disapproval, unless the issue is submitted to Dispute Resolution; and

c. The Fugitive Dust Plan shall be revised if the MDEQ determines it is insufficient to meet the applicable visible emissions limitations. A revised Fugitive Dust Plan shall be submitted to MDEQ for review and approval within 30 days after MDEQ provides written notification that the plan is insufficient, unless the issue is submitted to Dispute Resolution.

## VII. PERMITS

24. Where any compliance obligation under this Section requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Defendant may seek relief under the provisions of Section XI (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant has submitted timely and

complete applications and has taken all other actions necessary to obtain all such permits or approvals.

25. Permits to Ensure Survival of Certain Consent Decree Terms. Prior to termination of this Consent Decree, Defendant shall submit complete applications to MDEQ to incorporate the O&M Plan set forth in Appendix C into a non-Title V, federally enforceable permit to install that will survive termination of this Consent Decree. Additionally, prior to termination of this Consent Decree, Defendant shall submit a complete application to MDEQ to incorporate the Fugitive Dust Plan set forth in Appendix D into a non-Title V state-enforceable only permit to install that will survive termination of this Consent Decree. All permits shall authorize Defendant to make updates and revisions to the O&M Plan and the Fugitive Dust Control Plan and shall not require that permit amendments be obtained to authorize such updates and revisions.

26. Modifications to Title V Operating Permits. Prior to termination of this Consent Decree, Defendant shall submit complete applications to MDEQ to modify, amend, or revise the Facility's Title V permit to incorporate the injunctive relief components identified in the preceding Paragraph into the Title V permit. The Parties agree that the incorporation of these provisions into the Title V Permit shall be done in accordance with MDEQ's Title V rules.

#### VIII. STATE-ONLY SUPPLEMENTAL ENVIRONMENTAL PROJECT

~~27. Defendant shall implement a Supplemental Environmental Project ("SEP"), the Salina Schools Air Filtration Project, in accordance with all provisions of Appendix E.~~

~~28. Defendant is responsible for the satisfactory completion of the SEP in accordance with the requirements of this Decree. Defendant may use contractors or consultants in planning and implementing the SEP.~~

~~29. With regard to the SEP, Defendant certifies the truth and accuracy of each of the following:~~

- ~~a. that all cost information provided to EPA in connection with EPA's approval of the SEP is complete and accurate and that Defendant in good faith estimates that the cost to implement the SEP is \$337,000;~~
- ~~b. that, as of the date of executing this Decree, Defendant is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;~~
- ~~c. that the SEP is not a project that has any direct financial benefit to Defendant;~~

- ~~d. that Defendant has not received and will not receive credit for the SEP in any other enforcement action;~~
- ~~e. that Defendant will not receive any reimbursement for any portion of the SEP from any other person; and~~
- ~~f. that (i) Defendant is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEP described in Paragraph 27; and (ii) Defendant has inquired of the Dearborn Public Schools whether it is a party to an open federal financial assistance transaction that is funding or could fund the same activity as the SEP and has been informed by Dearborn Public Schools that it is not a party to such a transaction. For purposes of these certifications, the term “open federal financial assistance transaction” refers to a grant, cooperative agreement, loan, federally guaranteed loan guarantee, or other mechanism for providing federal financial assistance whose performance period has not yet expired.~~

~~30. SEP Completion Report~~

- ~~a. Within 30 days after the date set for completion of the SEP, Defendant shall submit a SEP Completion Report to the United States and MDEQ, in accordance with Section XVI (Notices). The SEP Completion Report shall contain the following information:
  - ~~(1) a detailed description of the SEP as implemented;~~
  - ~~(2) a description of any problems encountered in completing the SEP and the solutions thereto;~~
  - ~~(3) an itemized list of all eligible SEP costs expended;~~
  - ~~(4) certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and~~
  - ~~(5) a description of the environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).~~~~

~~31. EPA may, in its sole discretion, require information in addition to that described in the preceding Paragraph, in order to evaluate Defendant’s completion report.~~

~~32. After receiving the SEP Completion Report, EPA, after consultation with MDEQ, shall notify Defendant whether or not Defendant has satisfactorily completed the SEP. If~~

~~Defendant has not completed the SEP in accordance with this Consent Decree, stipulated penalties may be assessed under Section X.~~

~~33. Disputes concerning the satisfactory performance of the SEP and the amount of eligible SEP costs may be resolved under Section XII (Dispute Resolution). No other disputes arising under this Section shall be subject to Dispute Resolution.~~

~~34. Each submission required under this Section shall be signed by an official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 41.~~

~~35. Any public statement, oral or written, in print, film, or other media, made by Defendant making reference to the SEP under this Decree shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, United States and Michigan v. AK Steel Corporation, taken on behalf of the U.S. Environmental Protection Agency and the Michigan Department of Environmental Quality under the Clean Air Act."~~

~~36. For federal income tax purposes, Defendant agrees that it will neither capitalize into inventory or basis nor deduct any costs or expenditures incurred in performing the SEP.~~

27. Defendant shall implement a Supplemental Environmental Project ("SEP"), the South Dearborn Residential Indoor Air Quality Project, in accordance with all provisions of Appendix G.

28. Defendant is responsible for the satisfactory completion of the SEP in accordance with the requirements of this Consent Decree. Defendant may use contractors or consultants in planning and implementing the SEP.

29. With regard to the SEP, Defendant certifies the truth and accuracy of each of the following:

a. that all cost information provided to EGLE in connection with EGLE's approval of the SEP is complete and accurate and that Defendant in good faith estimates that the cost to implement the SEP is \$244,000;

b. that, as of the date of executing the Consent Decree Modification, Defendant is not required to perform or develop the SEP by any federal, state, or local law or regulation and is not required to perform or develop the SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum;

c. that the SEP is not a project that has any direct financial benefit to Defendant;

d. that Defendant has not received and will not receive credit for the SEP in any other enforcement action;

e. that Defendant will not receive any reimbursement for any portion of the SEP from any other person; and

f. that Defendant is not a party to any open federal financial assistance transaction that is funding or could fund the same activity as the SEP described in Paragraph 27. For purposes of this certification, the term “open federal financial assistance transaction” refers to a grant, cooperative agreement, loan, federally-guaranteed loan, or other mechanism for providing federal financial assistance whose performance period has not yet expired.

30. SEP Completion Report.

Within 30 Days after the date set for completion of the SEP, Defendant shall submit a SEP Completion Report to EGLE, in accordance with Section XVI (Notices). The SEP Completion Report shall contain the following information:

a. a detailed description of the SEP as implemented;

b. a description of any problems encountered in completing the SEP and the solutions thereto;

c. an itemized list of all eligible SEP costs expended;

d. certification that the SEP has been fully implemented pursuant to the provisions of this Decree; and

e. a description of the environmental and public health benefits resulting from implementation of the SEP (with a quantification of the benefits and pollutant reductions, if feasible).

31. EGLE may, in its sole discretion, require information in addition to that described in the preceding Paragraph, in order to evaluate Defendant’s SEP Completion Report.

32. After receiving the SEP Completion Report, EGLE shall notify Defendant whether or not Defendant has satisfactorily completed the SEP. If Defendant has not completed the SEP in accordance with this Consent Decree, stipulated penalties may be assessed under Section X.

33. Disputes concerning the satisfactory completion of the SEP and the amount of eligible SEP costs may be resolved under Section XII (Dispute Resolution). No other disputes arising under this Section shall be subject to Dispute Resolution.

34. Each submission required under this Section shall be signed by an official with knowledge of the SEP and shall bear the certification language set forth in Paragraph 41.



35. Any public statement, oral or written, in print, film, or other media, made by Defendant making reference to the SEP under this Consent Decree shall include the following language: “This project was undertaken in connection with the settlement of an enforcement action, *United States and Michigan v. Cleveland-Cliffs Steel Corporation*, taken on behalf of the Michigan Department of Environment, Great Lakes, and Energy under the Clean Air Act.”

36. [Reserved]

## IX. REPORTING REQUIREMENTS

37. Within 30 Days after the end of each calendar quarter (i.e., by April 30, July 30, October 30, and January 30) after lodging of this Consent Decree, until termination of this Decree pursuant to Section XX, Defendant shall:

a. submit to EPA and MDEQ by electronic mail the quarterly report described in Paragraph 20, together with any changes made to the O&M Plan and copies or print outs of all maintenance records or information related to the ESP required by Paragraph 20.c.

b. submit to MDEQ by electronic mail a quarterly report for the preceding quarter that shall contain the status of the activities required by Paragraph 23.

38. Within 45 days following the six month period that is the subject of the initial and each subsequent EMS Audit, the Defendant shall submit the EMS Audit Report to EPA and MDEQ.

39. Whenever (1) any violation of this Consent Decree, or (2) any violation of any applicable permits required by this Consent Decree, or (3) any event affecting Defendant’s performance under this Consent Decree, may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA and MDEQ orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

40. All reports shall be submitted to the persons designated in Section XVI (Notices). The following periodic reports submitted by Defendants pursuant to this Consent Decree shall be made publicly available, absent any material claimed to be confidential business information under 40 C.F.R. Part 2, upon written request to AK Steel at its postal address listed in Section XVI (Notices), (“ATTN: Environmental Affairs General Manager”):

- Audit reports, prepared pursuant to paragraph 17.b;
- Audit Response and Action Plans, prepared pursuant to paragraph 18;

- Quarterly reports of COM data, prepared pursuant to paragraph 20; and
- ESP annual inspection reports, prepared pursuant to paragraph 21.

41. Each report submitted by Defendant under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

42. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical. Where the timing requirements of Paragraph 39 make inclusion of this certification in a report submitted pursuant to Paragraph 39 impractical, Defendant shall provide this certification as a supplement to the initial report.

43. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

44. Any information provided pursuant to this Consent Decree may be used by the United States or MDEQ in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

#### X. STIPULATED PENALTIES

45. Defendant shall be liable for stipulated penalties to the United States and MDEQ for violations of this Consent Decree as specified below, unless excused under Section XI (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

46. Late Payment of Civil Penalty. If Defendant fails to pay the civil penalty required to be paid under Section V (Civil Penalty) when due, Defendant shall pay a stipulated penalty of \$1000 per Day for each Day that the payment is late.

47. Compliance Milestones.

a. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in Paragraph 47.b:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$350.....	1st through 14th day
\$750.....	15th through 30th day
\$3,250 .....	31st day and beyond

b. Compliance milestones subject to stipulated penalties:

- (1) EMS requirements set forth in Paragraphs 12 through 18;
- (2) ESP O&M requirements set forth in Paragraphs 19 through 22.
- (3) Completion of Phases I through IV of the ESP Project by its corresponding deadline as set forth in Paragraph 22.1.
- (4) Performance of the testing within the required time frames as set forth in Paragraphs 22.2 and 22.5.
- (5) Compliance with the emission limits for PM, PM<sub>10</sub>, PM<sub>2.5</sub> for the ESP stack contained in the Facility’s Renewable Operating Permit for emission unit EUBOF or other applicable permit demonstrated through the performance testing required by Paragraphs 22.2 and 22.5. Stipulated penalties may be imposed for each day of violation from the date performance testing demonstrates an exceedance of the Renewable Operating Permit limits until compliance is demonstrated, in accordance with 42 U.S.C. § 7413(e)(2).
- (6) Compliance with the Operating Standard requirement of Paragraph 22.4.b(2).
- (7) Performance of the visible emissions observations and the reporting of the results required by Paragraph 22.6.
- (8) Compliance with the requirements of Paragraphs 22.7.a(i), 22.7.a(ii), and 22.8.

c. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in Paragraph 23:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$300	1st through 5th day
\$750	6th through 10th day
\$3,250	11th day and beyond

d. Defendant’s failure to complete Phase V of the ESP Project by its corresponding deadline as set forth in Paragraph 22.1 shall result in a stipulated penalty of:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$700.....	1st through 14th day
\$1,500.....	15th through 30th day
\$5,000.....	31 <sup>st</sup> Day and beyond

e. The following stipulated penalties shall accrue per violation per Day, up to a maximum of \$54,000 for each failure to comply with the emission limits for Pb or Mn for the Secondary Baghouse and ESP stacks in the Facility’s Renewable Operating Permit for flexible group FGBOFSHOP or other applicable permit demonstrated through the testing required by Paragraphs 22.2 and 22.5:

<u>Penalty Per Violation Per day</u>	<u>\$600</u>
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Stipulated penalties may be imposed for each day of violation from the date performance testing demonstrates an exceedance of the Renewable Operating Permit limit until compliance is demonstrated, in accordance with 42 U.S.C. § 7413(e)(2). Any stipulated penalties imposed for failure to comply with the emission limit for Pb or Mn would be paid only to the State.

f. A stipulated penalty of \$1,500 per violation shall accrue for each violation of the Visible Emission Standard for the ESP stack, the 20% opacity limit for EUBOF roof monitor, and 15% opacity limit for FGBOFSHOP roof monitor in the Facility’s Renewable Operating Permit demonstrated through the EPA Method 9 or Reference Method 9C observations by EGLE or EPA or as required by Paragraphs 22.2, 22.5, 22.6, and 22.7.a(iii). Stipulated penalties may be imposed for each day of violation from the date an EPA Method 9 or Reference Method 9C observation demonstrates an exceedance of the Visible Emission Standard until compliance is demonstrated, in accordance with 42 U.S.C. § 7413(e)(2).

48. SEP Completion.

a. If Defendant fails to satisfactorily complete the SEP by the deadline set forth in Paragraph 27, Defendant shall pay stipulated penalties for each day for which it fails to satisfactorily complete the SEP, as follows:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$200	1st through 14th day
\$500	15th through 30th day
\$1,000	31st day and beyond

b. ~~If Defendant fails to implement the SEP, or abandons work on the SEP, Defendant shall pay a stipulated penalty of \$269,600. The penalty under this subparagraph shall accrue as of the date specified for completing the SEP or the date performance ceases, whichever is earlier~~ If Defendant fails to perform the SEP pursuant to this Consent Decree Modification, Defendant shall pay a stipulated penalty of \$244,000 to the State. If the SEP is completed in accordance with Paragraphs 27-28 and 32 of this Consent Decree Modification but Defendant spends less than the \$244,000 required to be spent for the project, Defendant shall pay to the State a stipulated penalty equal to the difference between \$244,000 and the amount actually spent.

49. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section IX.

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$300.....	1st through 14th day
\$750.....	15th through 30th day
\$3,250.....	31st day and beyond

50. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

51. The United States, or MDEQ, or both, may seek stipulated penalties under this Section by sending a written demand to Defendant, or by either Plaintiff sending a written demand to the Defendant, with a copy simultaneously sent to the other Plaintiff. Either Plaintiff may waive stipulated penalties or reduce the amount of stipulated penalties it seeks, in the unreviewable exercise of its discretion and in accordance with this Paragraph. Where both Plaintiffs seek stipulated penalties for the same violation of this Consent Decree, Defendant shall pay 50 percent to the United States and 50 percent to MDEQ. Where only one Plaintiff demands stipulated penalties for a violation, and the other Plaintiff does not join in the demand within 15 Days of receiving the demand, or timely joins in the demand but subsequently elects to waive or reduce stipulated penalties for that violation, Defendant shall pay the full stipulated penalties due for the violation to the Plaintiff making the demand less any amount paid to the other Plaintiff.

52. Stipulated penalties shall continue to accrue as provided in Paragraphs 46 through 49, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of EPA or MDEQ that is not appealed to the Court, Defendant shall pay accrued penalties determined to be owing, together with interest, to the United States or MDEQ within 30 Days of the effective date of the agreement or the receipt of EPA's or MDEQ's decision or order.

b. If the dispute is appealed to the Court and the United States or MDEQ prevails in whole or in part, Defendant shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

53. Defendant shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 9, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid. Defendant shall pay stipulated penalties owing to MDEQ in the manner set forth in Paragraph 11, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

54. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States or MDEQ from seeking any remedy otherwise provided by law for Defendant's failure to pay any stipulated penalties.

55. Subject to the provisions of Section XIV (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or MDEQ for Defendant's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the Act or Michigan Regulation 336.1901, Defendant shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

#### XI. FORCE MAJEURE

56. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. The requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include Defendant's financial inability to perform any obligation under this Consent Decree.

57. If any event occurs or has occurred that may delay or prevent the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event,

Defendant shall provide written notice to EPA and MDEQ within seven days of when Defendant first knew that the event might cause a delay or interruption. The notice shall include an explanation and description of the reasons for the delay or interruption; the anticipated duration of the delay or interruption; all actions taken or to be taken to prevent or minimize the delay or interruption; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or interruption or the effect of the delay or interruption; Defendant's rationale for attributing such delay or interruption to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health, welfare or the environment. Defendant shall include with any notice all available documentation supporting the claim that the delay or interruption was attributable to a force majeure event. Failure to comply with the above requirements shall preclude Defendant from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. Defendant shall be deemed to know of any circumstance of which Defendant, any entity controlled by Defendant, or Defendant's contractors knew or should have known.

58. If EPA, after a reasonable opportunity for review and comment by MDEQ, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA, after a reasonable opportunity for review and comment by MDEQ, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify Defendant in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

59. If EPA, after a reasonable opportunity for review and comment by MDEQ, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Defendant in writing of its decision.

60. If Defendant elects to invoke the dispute resolution procedures set forth in Section XII (Dispute Resolution), it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Defendant shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Defendant complied with the requirements of Paragraphs 56 and 57. If Defendant carries this burden, the delay at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

## XII. DISPUTE RESOLUTION

61. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. Defendant's failure to seek resolution of a dispute

under this Section shall preclude Defendant from raising any such issue as a defense to an action by the United States or MDEQ to enforce any obligation of Defendant arising under this Decree.

62. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when Defendant sends the United States and MDEQ a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States, (or MDEQ for disputes related to Paragraphs 23, 27-36) shall be considered binding unless, within 20 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

63. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and MDEQ a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Defendant's position and any supporting documentation relied upon by Defendant.

64. The United States (or MDEQ for disputes related to Paragraphs 23, 27-36) shall serve its Statement of Position within 45 Days of receipt of Defendant's Statement of Position. The United States' (or, as applicable, MDEQ's) Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by Plaintiff. The Plaintiff's Statement of Position shall be binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

65. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States and MDEQ, in accordance with Section XVII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within ten Days of receipt of the Plaintiff's Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

66. The United States (or MDEQ for disputes related to Paragraphs 23, 27-36) shall respond to Defendant's motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

67. Standard of Review. Except as otherwise provided in this Consent Decree, in any other dispute brought under Paragraph 63, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree and that it is entitled to relief under applicable principles of law. The United States reserves the right to argue that its position is reviewable



only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law, and Defendant reserves the right to oppose this position.

68. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 52. If Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X (Stipulated Penalties).

### XIII. INFORMATION COLLECTION AND RETENTION

69. The United States, MDEQ, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States or MDEQ in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by Defendant or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess Defendant's compliance with this Consent Decree.

70. Upon request, Defendant shall provide EPA and MDEQ or their authorized representatives splits of any samples taken by Defendant to the extent technically feasible. Upon request, EPA and MDEQ shall provide Defendant splits of any samples taken by EPA or MDEQ to the extent technically feasible.

71. Defendant may also assert that information required to be provided under this Section, including documentary evidence obtained pursuant to Paragraph 69.d., is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

72. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or MDEQ pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

#### XIV. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

73. This Consent Decree resolves the civil claims of the United States and MDEQ for the violations alleged in the Complaint filed in this action through the date of lodging. This Consent Decree also resolves any administrative or civil judicial actions that could be brought by the United States or MDEQ regarding violations alleged in the notices listed in Appendix A.

73.1 This Consent Decree also resolves any administrative or civil judicial actions that could have been brought by the State of Michigan or EGLE regarding violations alleged in the Violation Notices issued by EGLE, and the roof monitor violations, included in Appendix F.

74. The United States and MDEQ reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 73. This Consent Decree shall not be construed to limit the rights of the United States or MDEQ to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 73. The United States and MDEQ further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

75. In any subsequent administrative or judicial proceeding initiated by the United States or MDEQ for injunctive relief, civil penalties, other appropriate relief relating to the Facility, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or MDEQ in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 73.

76. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits; and Defendant's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and MDEQ do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Defendant's compliance with any aspect of this Consent Decree will result in compliance with any provisions of the Act, 42 U.S.C. § 7401 *et seq.*, or with any other provisions of federal, state, or local laws, regulations, or permits.

77. This Consent Decree does not limit or affect the rights of Defendant or of the United States or MDEQ against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendant, except as otherwise provided by law.

78. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XV. COSTS

79. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and MDEQ shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendant.

XVI. NOTICES

80. Unless otherwise specified in this Consent Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing, sent by electronic mail to the following addresses:

As to the United States: eescasemanagement.enrd@usdoj.gov  
Re: DJ# 90-5-2-1-10702

As to EPA: Air Enforcement and Compliance Assurance Branch  
U.S. Environmental Protection Agency, Region 5  
R5airenforcement@epa.gov

and

Louise Gross  
Associate Regional Counsel  
U.S. Environmental Protection Agency, Region 5  
gross.louise@epa.gov

and

Daniel Schaufelberger  
Environmental Scientist  
Environmental Protection Agency, Region 5  
Schaufelberger.daniel@epa.gov

As to EGLE: Elizabeth Morrisseau  
Assistant Attorney General  
Environment, Natural Resources, and Agricultural Division  
Michigan Attorney General's Office  
MorrisseauE@michigan.gov

and

Katherine Koster  
Michigan Department of Environment, Great Lakes, and Energy  
Detroit District Office  
Kosterk1@michigan.gov

As to Defendant:

Traci Forrester  
Cleveland-Cliffs Inc.  
Executive Vice President, Environmental & Sustainability  
traci.forrester@clevelandcliffs.com

~~As to the United States : \_\_\_\_\_ eescasemanagement.enrd@usdoj.gov~~  
~~\_\_\_\_\_ Re: DJ # 90-5-2-1-10702~~

~~As to the United States (by mail): \_\_\_\_\_ EES Case Management Unit~~  
~~\_\_\_\_\_ Environment and Natural Resources Division~~  
~~\_\_\_\_\_ U.S. Department of Justice~~  
~~\_\_\_\_\_ P.O. Box 7611~~  
~~\_\_\_\_\_ Washington, D.C. 20044-7611~~  
~~\_\_\_\_\_ Re: DJ # 90-5-2-1-10702~~

~~As to EPA (by mail and email): \_\_\_\_\_ Air Enforcement and Compliance Assurance~~  
~~\_\_\_\_\_ Branch~~  
~~\_\_\_\_\_ U.S. Environmental Protection Agency, Region 5~~  
~~\_\_\_\_\_ R5airenforcement@epa.gov~~

~~\_\_\_\_\_ and~~

~~\_\_\_\_\_ Kasey BartonLouise Gross~~  
~~\_\_\_\_\_ Associate Regional Counsel~~  
~~\_\_\_\_\_ Environmental Protection Agency, Region 5~~  
~~\_\_\_\_\_ 77 West Jackson Blvd. (C-14J)~~  
~~\_\_\_\_\_ Chicago, IL 60604-3590~~  
~~\_\_\_\_\_ (312) 886-7163~~  
~~\_\_\_\_\_ Gross.loouiseBarton.kasey@epa.gov~~

~~\_\_\_\_\_ and~~

~~\_\_\_\_\_ Daniel Schaufelberger~~  
~~\_\_\_\_\_ Environmental Scientist~~  
~~\_\_\_\_\_ Environmental Protection Agency, Region 5~~

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\_\_\_\_\_  
77 West Jackson Blvd. (AE-17J)  
Chicago, IL 60604-3590  
(312) 886-4044  
[schaufelberger.daniel@epa.gov](mailto:schaufelberger.daniel@epa.gov)

As to EGLEMDEQ (by mail and email): Neil D. GordonElizabeth Morrisseau  
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Assistant Attorney General  
Environment, Natural Resources and Agricultural  
Division  
Michigan Department of Attorney General's Office  
Environment, Natural Resources  
and Agriculture Division  
P.O. Box 30755  
Lansing, MI 48909  
[MorrisseauEGordon1@michigan.gov](mailto:MorrisseauEGordon1@michigan.gov)

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and

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Katherine Koster  
Michigan Department of Environment, Great Lakes,  
and Energy  
Detroit District Office  
[Kosterk1@michigan.gov](mailto:Kosterk1@michigan.gov)

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Michael Kovalchick  
Michigan Department of Environmental Quality  
Air Quality Division  
P.O. Box 30260  
Lansing, MI 48909  
(517) 284-6769  
[kovalchickm@michigan.gov](mailto:kovalchickm@michigan.gov)

As to Defendant (by mail and email):

\_\_\_\_\_  
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Joseph C. Alter  
AK Steel Corporation  
9227 Centre Point Drive  
West Chester, Ohio 45069  
(513) 425-5000  
[joe.alter@aksteel.com](mailto:joe.alter@aksteel.com)

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Traci Forrester

~~Cleveland-Cliffs Inc.~~  
~~Executive Vice President, Environmental &~~  
~~Sustainability~~  
~~traci.forrester@clevelandcliffs.com~~

and

~~David Miraele~~  
~~AK Steel Corporation~~  
~~9227 Centre Point Drive~~  
~~West Chester, Ohio 45069~~  
~~(513) 425-5000~~

81. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

82. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

#### XVII. EFFECTIVE DATE

83. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

#### XVIII. RETENTION OF JURISDICTION

84. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XII and XIX, or effectuating or enforcing compliance with the terms of this Decree.

#### XIX. MODIFICATION

85. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

86. Any disputes concerning modification of this Decree shall be resolved pursuant to Section XII (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 67, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

## XX. TERMINATION

~~87. This Consent Decree may be terminated when the United States determines (after consultation with MDEQ) that Defendant has satisfactorily completed performance of its Compliance Requirement obligations in Section VI, including implementing and auditing its EMS, and carrying out the requirements relating to the Electrostatic Precipitator and Fugitive Dust Emissions; implemented the SEP; received new or amended non-Title V permits based upon the applications submitted by Defendant pursuant to Paragraph 25; received new or amended Title V permits based upon the applications submitted by Defendant pursuant to Paragraph 26; has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree; and five years has passed since the Effective Date of this Consent Decree. The Parties shall file with the Court an appropriate stipulation reciting that the requirements of the Consent Decree have been met and requesting termination of the Decree.~~

87. This Consent Decree may be terminated when the United States determines (after consultation with EGLE) that Defendant has satisfactorily completed performance of all of the following Consent Decree obligations:

- a. received new or amended federally-enforceable non-Renewable Operating Permits based upon the applications submitted by Defendant pursuant to Paragraph 25;
- b. received new or amended Renewable Operating Permits based upon the applications submitted by Defendant pursuant to Paragraph 26;
- c. satisfactorily completed the ESP Project pursuant to Paragraph 22.1 or demonstrated the permanent and unrecoverable shutdown of the BOF;
- d. completed 18 months of operation after satisfactory completion of the ESP Project with no exceedance of the Visible Emission Standard for the ESP stack, as demonstrated through the EPA Method 9 observations required by Paragraph 22.6;
- e. maintained substantial compliance with the Visible Emission Standard for the BOF Shop roof monitor, as demonstrated through Reference Method 9C observations;
- f. conducted the performance tests as required by Paragraphs 22.2 and 22.5;

g. conducted the tests demonstrating compliance with emission limits for PM, PM<sub>10</sub>, PM<sub>2.5</sub>, and the Visible Emission Standard in accordance with Paragraphs 22.2 and 22.5; and

h. paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree then due and owing.

88. Following receipt by the United States and MDEQ of Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States after consultation with MDEQ agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

89. If the United States after consultation with MDEQ does not agree that the Decree may be terminated, Defendant may invoke Dispute Resolution under Section XII. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination until 60 Days after service of its Request for Termination.

#### XXI. PUBLIC PARTICIPATION

90. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendant consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendant in writing that it no longer supports entry of the Decree.

#### XXII. SIGNATORIES/SERVICE

91. Each undersigned representative of Defendant, MDEQ and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

92. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.



### XXIII. INTEGRATION

93. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

### XXIV. FINAL JUDGMENT

94. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, MDEQ, and Defendant.

### XXV. APPENDICES

95. The following Appendices are attached to and made part of this Consent Decree:

“Appendix A” is the list of violation notices and notices of violation;

“Appendix B” is the Compliance-Focused EMS Elements;

“Appendix C” is the Operations & Maintenance Plan for the BOF ESP;

“Appendix D” is the Fugitive Dust Control Plan for Slag Handling; and

“Appendix E” is the Supplemental Environmental Project, Salina Schools Air Filtration Project

“Appendix F” is the list of Violation Notices and deviations issued by EGLE to Defendant.

“Appendix G” is the State-only SEP.

### XXVI. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION

96. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2), performance of the requirements in Paragraphs 22 and 27-36 are restitution remediation, or required to come into compliance with law.

“Appendix D” is the Fugitive Dust Control Plan for Slag Handling; and

“Appendix E” is the Supplemental Environmental Project, Salina Schools Air Filtration Project

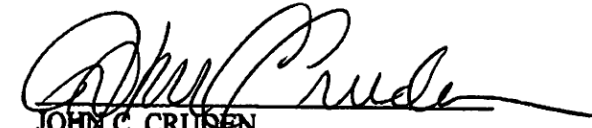
Dated and entered this 13<sup>th</sup> day of August, 2015

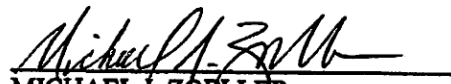


UNITED STATES DISTRICT JUDGE


FOR THE UNITED STATES OF AMERICA:

5/19/2015  
Date

  
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Environment and Natural Resources Division  
U.S. Department of Justice

  
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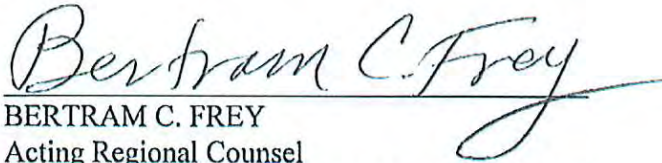
  
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FOR THE U.S. ENVIRONMENTAL PROTECTION  
AGENCY:



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SUSAN HEDMAN  
Regional Administrator  
U.S. Environmental Protection Agency, Region 5



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BERTRAM C. FREY  
Acting Regional Counsel  
U.S. Environmental Protection Agency, Region 5



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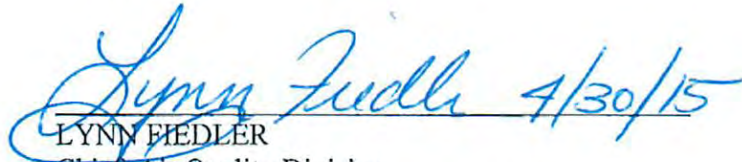
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FOR THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY:

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Attorney General

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Michigan Department of Attorney General  
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(517) 373-7540

 4/30/15

LYNN FIEDLER  
Chief, Air Quality Division  
Michigan Department Environmental Quality  
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Lansing, MI 48909  
(517) 284-6773

15-cv-11804-LWP-SJS-WEH Document 106 Filed 04/05/15

FOR AK STEEL CORPORATION:

4/10/15  
Date



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JOSEPH C. ALTER  
Vice President, General Counsel and  
Chief Compliance Officer  
AK Steel Corporation  
9227 Centre Pointe Drive  
West Chester, Ohio 45069  
(513) 425-5000

## APPENDIX A

**LIST OF VIOLATION NOTICES AND NOTICES OF VIOLATION**

<b><u>VN or NOV Date</u></b>	<b><u>Authority</u></b>	1/30/2013	MDEQ
8/12/2008	MDEQ	3/5/2013	EPA
10/06/2008	MDEQ	3/8/2013	MDEQ
2/24/2009	MDEQ	3/27/2013	MDEQ
4/23/2009	MDEQ	5/13/2013	MDEQ
7/17/2009	MDEQ	4/15/2014	MDEQ
10/7/2009	MDEQ	9/2/2014	MDEQ
10/28/2009	MDEQ	10/27/2014	MDEQ
1/6/2010	MDEQ		
2/11/2010	MDEQ		
5/18/2010	MDEQ		
8/18/2010	MDEQ		
10/28/2010	MDEQ		
11/22/2010	MDEQ		
12/10/2010	MDEQ		
1/5/2011	MDEQ		
3/15/2011	MDEQ		
4/28/2011	MDEQ		
8/16/2011	MDEQ		
9/20/2011	MDEQ		
10/24/2011	MDEQ		
12/8/2011	MDEQ		
3/29/2012	MDEQ		
5/1/2012	MDEQ		
5/10/2012	MDEQ		
5/16/2012	MDEQ		
6/15/2012	EPA		
6/29/2012	MDEQ		
7/19/2012	MDEQ		
7/31/2012	MDEQ		
8/14/2012	MDEQ		
9/13/2012	MDEQ		
9/13/2012	MDEQ		
9/27/2012	MDEQ		
11/14/2012	MDEQ		
11/29/2012	MDEQ		
1/24/2013	MDEQ		

<b><u>VN or NOV Date</u></b>	<b><u>Authority</u></b>
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## **APPENDIX B**

### **COMPLIANCE-FOCUSED ENVIRONMENTAL MANAGEMENT SYSTEM ELEMENTS**

*United States, et al. v. AK Steel Corporation/Dearborn Works*

#### **1. Environmental Policy**

- a. This policy, upon which the EMS is based, must clearly communicate management commitment to achieving compliance with applicable federal, state, and local environmental statutes, regulations, enforceable agreements, and permits regarding air emissions (hereafter, “environmental requirements”), minimizing risks to the environment from unplanned or unauthorized air emissions, and continual improvement in environmental performance. The policy should also state management’s intent to provide adequate personnel and other resources for the EMS.

#### **2. Organization, Personnel, and Oversight of EMS**

- a. Identifies and defines specific duties, roles, responsibilities, and authorities of key environmental staff in implementing and sustaining the EMS (e.g., could include position descriptions and/or performance standards for all environmental department personnel, and excerpts from others having specific environmental duties, and regulatory compliance responsibilities).
- b. Includes organization charts that identify environmental duties and regulatory compliance responsibilities.
- c. Includes ongoing means of communicating environmental issues and information among the various levels and functions of the organization, to include all persons working for or on behalf of the organization (e.g., on-site service providers and contractors who function as *de facto* employees), and for receiving and addressing their concerns.

#### **3. Accountability and Responsibility**

- a. Specifies accountability and environmental responsibilities of organization’s managers, and managers of other organizations acting on its behalf for environmental protection and risk reduction measures, assuring compliance, required reporting to regulatory agencies, and corrective actions implemented in their area(s) of responsibility.



- b. Describes potential consequences for departure from specified operating procedures, including liability for civil/administrative penalties imposed as a result of noncompliance.

#### **4. Environmental Requirements**

- a. Describes process for identifying potentially applicable environmental requirements; interpreting their applicability to specific operations, and emissions; and effectively communicating those applicable environmental requirements to affected persons working for or on behalf of the organization.
- b. Describes a process for developing, implementing and maintaining ongoing internal compliance monitoring to ensure that facility activities conform to applicable environmental requirements. Compliance monitoring shall include inspections and measurements, as appropriate.
- c. Describes procedures for prospectively identifying and obtaining information about changes and proposed changes in environmental requirements, and incorporating those changes into the EMS (i.e., regulatory “change management”).
- d. Describes a procedure for communicating with regulatory agencies regarding environmental requirements and regulatory compliance.

#### **5. Assessment, Prevention, and Control**

- a. Identifies an ongoing process for assessing operations, for the purposes of preventing, controlling, or minimizing reasonably foreseeable releases of air pollutants, environmental process hazards, and risks of noncompliance with environmental requirements. This process shall include identifying operations where equipment malfunctions and deterioration, and/or operator errors or deliberate malfeasance, are causing, or have the potential to cause: (1) unplanned or unauthorized releases of hazardous or harmful air pollutants, (2) a threat to human health or the environment, or (3) noncompliance with environmental requirements.
- b. Describes process for identifying operations and activities where documented operating criteria, such as standard operating procedures (SOPs), are needed to prevent noncompliance or unplanned/unauthorized releases of hazardous or harmful air pollutants, and defines a uniform process for developing, approving and implementing the documented operating criteria.
- c. Describes a system for conducting and documenting routine, objective, self-inspections, especially at locations identified by the process described in (a)

above, to check for malfunctions, deterioration, worker adherence to operating criteria, unusual situations, and unauthorized or unplanned releases.

- d. Describes a “management of change” process to ensure identification and consideration of environmental requirements, the environmental aspects/impacts, and potential operator errors or deliberate malfeasance during planning, design, and operation of ongoing, new, and/or changing buildings, processes, equipment, maintenance activities, and products.

**6. Environmental Incident and Non-compliance Investigations**

- a. Describes standard procedures and requirements for internal and external reporting of environmental incidents and noncompliance with environmental requirements.
- b. Establishes procedures for investigation, and prompt and appropriate correction of noncompliance. The investigation process includes root-cause analysis of identified problems to aid in developing the corrective actions.
- c. Describes a system for development, tracking, and effectiveness verification of corrective and preventative actions.

**7. Environmental Training, Awareness, and Competence**

- a. Identifies specific education and training required for organization personnel or those acting on its behalf, as well as process for documenting training provided
- b. Describes program to ensure that organization employees or those acting on its behalf are aware of its environmental policies and procedures, environmental requirements, and their roles and responsibilities within the environmental management system.
- c. Describes program for ensuring that personnel responsible for meeting and maintaining compliance with environmental requirements are competent on the basis of appropriate education, training, and/or experience.
- d. Identifies training on how to recognize operations where equipment malfunctions and deterioration, and/or operator errors or deliberate malfeasance, are causing, or have the potential to cause: (1) unplanned or unauthorized releases of hazardous or harmful air pollutants to the environment, (2) a threat to human health or the environment, or (3) noncompliance with environmental requirements.

**8. Environmental Planning and Organizational Decision-Making**

- a. Describes how environmental planning will be integrated into organizational decision-making, including plans and decisions on capital improvements, product and process design, training programs, and maintenance activities.
- b. Requires establishing, on an annual basis, written targets, objectives, and action plans for improving environmental performance, by at least each operating organizational subunit with environmental responsibilities, as appropriate, including those for contractor operations conducted at the facility, and how specified actions will be tracked and progress reported. Targets and objectives must include actions that reduce the risk of noncompliance with environmental requirements and minimize the potential for unplanned or unauthorized releases of hazardous or harmful contaminants.

**9. Maintenance of Records and Documentation**

- a. Identifies the types of records developed in support of the EMS (including audits and reviews), who maintains them and, where appropriate, security measures to prevent their unauthorized disclosure, and protocols for responding to inquiries and requests for release of information.
- b. Specifies the data management systems for any internal environmental data.
- c. Specifies document control procedures.

**10. Continuing Program Evaluation and Improvement**

- a. Describes program for periodic (at least annually) evaluation of the EMS, which specifies a process for translating assessment results into EMS improvements. The program shall include communicating findings and action plans to affected organization employees or those acting on its behalf.
- b. Describes a program for periodic audits of facility compliance with environmental requirements. Audit results are reported to upper management and instances of noncompliance are addressed through the process described in element 6 above.

**11. Public Involvement/Community Outreach**

- a. Describes a program for ongoing community education and involvement in the environmental aspects of the organization's operations and general environmental awareness.

**APPENDIX C**

**OPERATIONS & MAINTENANCE PLAN FOR THE BOF ESP**

## APPENDIX D

### FUGITIVE DUST CONTROL PLAN FOR SLAG HANDLING

This Fugitive Dust Control Plan for Slag Handling (“Fugitive Dust Plan”) for AK Steel Dearborn Works applies to the handling of slag generated from the blast furnaces (“blast furnace slag”) and slag, scrap steel, steel, and lime that accumulates in the areas underneath the basic oxygen furnaces (“runway slag”).

#### I. Blast Furnace Slag

##### A. Process Description

1. Molten blast furnace slag produced by the blast furnaces is poured into slag pots. The slag pots are picked up and transported to three blast furnace slag pits by slag pot carriers.
2. Prior to receiving molten slag, a blast furnace slag pit is reconstructed using solidified, hot slag excavated from a previous blast furnace slag pit. The solidified slag is used to create the floor and side walls of the reconstructed slag pit. Hot slag is used to ensure no water is trapped within the pit floor. The presence of water in the pit floor creates a safety concern, due to the potential for an explosion when molten slag is poured into the pit.
3. Molten blast furnace slag is dumped from slag pots into a reconstructed slag pit for 24 hours. After a 24-hour shift, the pit is closed and a new pit is opened for receiving slag. The empty slag pots are returned to the blast furnace for reuse. Periodically, a skin of slag will harden on the inside of a slag pot, and the pot will be knocked to remove the skin prior to reuse.
4. After a blast furnace slag pit is full and closed for receipt of additional molten slag, water is used to accelerate the cooling of the molten slag in the pit and to reduce particulate matter emissions during future slag processing. Potassium permanganate is added to the water to prevent potential hydrogen sulfide emissions.
5. After the blast furnace slag in the slag pit has cooled and solidified adequately to allow safe processing, a front end loader is used to fracture the solidified slab of slag into pieces small enough to facilitate excavation by the front end loader. The slag pits may be sprayed with additional water during this initial step of slag processing, at the operator’s discretion, to further solidify the slag. Due to the high potential for creating explosive

conditions, additional watering of the pits during this initial step of slag processing is carefully monitored.

6. The excavated slag is placed into temporary stockpiles prior to shipment off-site for further processing. The slag in the temporary stockpiles is sprayed with water to accelerate the cooling process and to minimize particulate emissions during truck loading.
7. Each water spray has a water delivery capacity of 30 gallons per minute.

B. Control Measures

1. Water sprays shall be used to quench and solidify the blast furnace slag in the blast furnace slag pits. Potassium permanganate shall be added to the water to prevent hydrogen sulfide emissions.
2. Inspections shall be performed at least once each month to determine the operational condition of the water sprays at the blast furnace slag pits. A written record of the inspections shall be maintained and shall include a description of any failure of the water sprays, the reasons for the failure, and the corrective action(s) taken.
3. Inspections shall be performed at least once each month to determine the operational condition of the equipment that injects potassium permanganate into the water used in the water sprays at the blast furnace slag pits. A written record of the inspections shall be maintained and shall include a description of any failure of the equipment, the reasons for the failure, and the corrective action(s) taken.
4. Water shall be sprayed on the temporary stockpiles of partially processed slag to minimize particulate emissions during future material handling operations, including truck loading. At least two water sprays shall be maintained and operational.
5. Inspections shall be performed at least once each month to determine the operational condition of the water sprays. A written record of the inspections shall be maintained and shall include a description of any failure of the water sprays, the reasons for the failure, and the corrective action(s) taken.
6. Dump heights from loader buckets shall be no more than two feet above the side board of the truck bed.
7. A Method 9 certified visible emission observation of digging slag in the blast furnace slag pits shall be performed at least once every two weeks

for a minimum of 15 minutes for each observation. Corrective action shall be initiated upon observation of visible emissions in excess of the applicable visible emission limitation and a written record shall be maintained of each required observation and corrective action taken.

8. A Method 9 certified visible emission observation of loading slag from the temporary stockpiles into trucks shall be performed at least once every two weeks for a minimum of 15 minutes. Corrective action shall be initiated upon observation of visible emissions in excess of the applicable visible emission limitation and a written record shall be maintained of each required observation and corrective action taken.

## II. Runway Slag

### A. Process Description

1. The areas underneath the two basic oxygen furnaces are known as “runways.” Slag, scrap steel, steel, and lime accumulate in the runways. The conglomeration of these accumulated materials is known as “runway slag.”
2. The runways are cleaned periodically to remove accumulated runway slag. The slag is removed from each runway approximately three times per day by a front end loader.
3. Runway slag is loaded into trucks on the east side of the Basic Oxygen Furnace (“BOF”) building. The runway slag is either (a) loaded directly into trucks after it is removed from a runway by a front end loader or (b) a front end loader first places the slag into a temporary stockpile and later removes the slag from the temporary stockpile and loads it into trucks. Fugitive dust is controlled with water during these material handling operations through the use of atomized mist technology or water sprays during truck loading and through the use of atomized mist technology or water sprays to saturate the slag prior to its removal from the temporary stockpiles.
4. Trucks loaded with dry runway slag are driven to the truck watering station, located adjacent to the desulfurization slag pot watering station, where the runway slag is watered in the truck to control particulate matter emissions during subsequent dumping and processing. After watering, the trucks transport the runway slag to the BOF slag pits or debris staging area for further processing. The truck watering station sprays water at a rate of approximately 10 gallons per minute.

5. After a runway is cleaned, a layer of BOF slag is placed on the floor of the runway to facilitate future cleaning efforts.

B. Control Measures

1. Fugitive dust shall be controlled with water through the use of atomized mist technology or water sprays during truck loading and through the use of atomized mist technology or water sprays to saturate the slag prior to its removal from the temporary stockpiles.
2. Dry runway slag in trucks shall be watered sufficiently at the truck watering station to minimize particulate matter emissions during subsequent dumping and processing.
3. Dump heights from loader buckets shall be no more than two feet above the side board of the truck.
4. Inspections shall be performed at least once each month to determine the operational condition of all emission control equipment employed (e.g. the water atomizing equipment, water sprays). A written record of the inspections shall be maintained and shall include any failure of the emission control equipment, the reasons for the failure, and the corrective action taken.
5. A Method 9 certified visible emission observation of loading runway slag into trucks shall be performed at least once every two weeks for a minimum of 15 minutes. Corrective action shall be initiated upon observation of visible emissions in excess of the applicable visible emission limitation and a written record shall be maintained for each required observation and corrective action taken.



## **APPENDIX E**

### **SUPPLEMENTAL ENVIRONMENTAL PROJECT**

#### **Salina Schools Air Filtration Project**

##### **I. DESCRIPTION**

The project involves the procurement and installation of an enhanced air filtration system at the Salina Elementary School and Salina Intermediate School in Dearborn, Michigan, which will result in improved air quality within the school.

The primary focus of the project is to replace the two schools' existing passive air filtration systems with a new more effective active filtration system, specifically the Dynamic Air V8 Cleaning System, manufactured by Dynamic Air Quality Solutions. The system will be retrofitted into the schools' existing air handling units.

The Dynamic Air V8 Cleaning System combines elements of both passive filters and active electrostatic precipitators to enhance particulate removal. Based on manufacturer's specifications, it is estimated that the new system has the ability to remove approximately 30% more sub-micron particles than the schools' existing passive filters. In addition, based on manufacturer's specifications, it is estimated that the Dynamic Air V8 Cleaning System has the ability to remove approximately 60% of gaseous odors and volatile organic compounds (VOCs), whereas the schools' existing passive air filtration system does not remove any VOCs or other gasses.

The Dynamic Air V8 Cleaning System will also provide additional benefits beyond improved indoor air quality. There should be a reduction in fan energy consumption due to reduced static pressure. Also, there should be a reduction in maintenance costs due to fewer filtration changes. The schools' existing passive filter media has to be replaced approximately 3 to 4 times per year, while the filters for the Dynamic Air V8 Cleaning System only have to be replaced approximately once every 5 years.

##### **II. SCOPE OF WORK**

The project will in general include the following:

1. Salina Intermediate School
  - Purchase and install Dynamic filters in three Basement air handlers, two Band Room air handlers, one Auditorium air handler, three classroom units and one Cafeteria Remote Thermal Unit (RTU).
  - Remove and dispose of old filter systems.
  - Purchase and install 30-Ton Condensing unit and DX coil to serve Auditorium.

## 2. Salina Elementary School

- Purchase and install Dynamic filters in twenty-four classroom units.
- Purchase and install two Trane roof mounted custom filter housing with Dynamic filters pre-installed in the housing.

**III. SCHEDULE**

<b>Task</b>	<b>Timing</b>
Contract Execution with Contractor	Within 14 Days of Effective Date
Equipment Order and Lead Time for Procurement	Within 70 Days of Effective Date
Installation and Startup	Within 120 Days of Effective Date

**IV. ESTIMATED COST**

	<b>Cost</b>
Equipment	\$204,000
Installation	\$133,000
<b>PROJECT TOTAL</b>	<b>\$337,000</b>

**APPENDIX F**

**VIOLATION NOTICES AND DEVIATIONS**

<u>Date of Notice</u>	<u>Date of Violation</u>	<u>Subject</u>
November 18, 2019	August 2019	Pb and Mn emissions
November 26, 2019	September 2019	Pb and Mn emissions
March 16, 2020	December 2019	Pb and Mn emissions, ESP opacity
July 15, 2020	1 <sup>st</sup> Quarter 2020	exceedances ESP opacity exceedances
January 5, 2021	3 <sup>rd</sup> Quarter 2020	ESP opacity exceedances and failure to report
August 2, 2022	1 <sup>st</sup> Quarter 2022	ESP opacity exceedances
December 19, 2022	December 2022	EUBOF opacity exceedances
Various	10/2015-12/2022	FGBOFSHOP opacity exceedances
Various	02/2016-12/2023	EUBOF opacity exceedances



DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

GRETCHEN WHITMER  
GOVERNOR

November 18, 2019

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On October 15, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), received the stack test report for the Basic Oxygen Furnace (BOF) and BOF Shop Operations conducted on August 13 and 14, 2019, at AK Steel Dearborn Works located at 4001 Miller Road, Dearborn, Michigan. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the stack test report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.10	The stack test result was 0.095 pounds per hour (pph) of Pb(lead) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.067 pph for Pb.
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.12	The stack test result was 0.23 pph of Mn(manganese) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 2  
November 18, 2019

		The permit limit for the FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.10 pph for Mn.
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Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by December 9, 2019 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel Dearborn Works believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Ms. Wilhemina McLemore, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

November 26, 2019

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On November 18, 2019, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), received the stack test report for testing conducted on September 17, 2019. Testing was conducted on the Basic Oxygen Furnace (BOF) and BOF Shop Operations at AK Steel Dearborn Works ("AK Steel") located at 4001 Miller Road, Dearborn, Michigan. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the stack test report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.10	The stack test result was 0.158 pounds per hour (pph) of Pb(lead) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.067 pph for Pb.
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, S.C.I.12	The stack test result was 0.16 pph of Mn(manganese) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for the FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.10 pph for Mn.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 2  
November 26, 2019

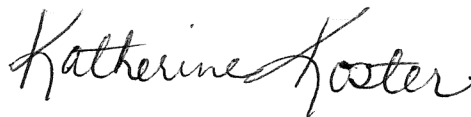
Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by December 17, 2019 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel Dearborn Works believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Mr. Neil Gordon, AG  
Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Ms. Wilhemina McLemore, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

March 16, 2020

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On March 12, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 4<sup>th</sup> quarter of 2019 as well as the 2019 ESP annual inspection report for AK Steel Dearborn Works (AK Steel hereafter) located at 4001 Miller Road, Dearborn, Michigan. Additionally, AQD reviewed the stack test report received on February 20, 2020, for the BOF and BOF Shop Operations test conducted on December 17, 2019. Staff reviewed the aforementioned reports to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the reports, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, Special Condition (SC) I.10	The stack test result was 0.123 pounds per hour (pph) of Pb (lead) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.  The permit limit for FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.067 pph for Pb.
FGBOFSHOP	ROP No. MI-ROP-A8640-2016a, FGBOFSHOP, SC I.12	The stack test result was 0.18 pph of Mn (manganese) for the FGBOFSHOP Secondary Baghouse and ESP stacks combined.



Mr. LaDale Combs  
 AK Steel Dearborn Works  
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 March 16, 2020

		<p>The permit limit for the FGBOFSHOP Secondary Baghouse and ESP stacks combined is 0.10 pph for Mn.</p>
EUBOF	<p>ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)</p>	<p>Based on the certified Method 9 visible emissions readings of the ESP taken during the August 14, 2019 stack test, an exceedance of the 20% 6-minute average limit was observed.</p> <p>On August 14, 2019, from 3:25:15 PM to 3:31:00 PM, the 6-minute average opacity was 30%.</p> <p>Additionally, quarterly COMS opacity reports contain exceedances of the 20% 6-minute average opacity limit from the ESP stack during every quarter starting with the 4<sup>th</sup> quarter of 2015 through the 4<sup>th</sup> quarter of 2019.</p>
EUBOF	<p>ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1;  R 336.1910</p>	<p>In 2019, the ESP failed stack testing for Pb and Mn in August, September, and December.</p> <p>The ESP has ongoing exceedances of the 20% 6-minute average opacity limit as recorded by the COMS.</p> <p>The 2019 ESP annual inspection report notes that many components are beyond the point of repair and need to be replaced.</p> <p>This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance</p>

Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 3  
 March 16, 2020

		with the rules and existing law.
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Emissions of Mn and Pb at the BOF Shop operations are limited within ROP No. MI-ROP-A8640-2016a, FGBOFSHOP based on the combined value in pounds per hour from the ESP stack and the Secondary Baghouse stack. The limits are 0.067 pph for lead (SC I.10) and 0.10 pph for manganese (SC I.12). AK Steel measured emissions of lead and manganese from the ESP stack and the Secondary Baghouse stack on December 17, 2019, following similar testing conducted by AK Steel on August 13-14, 2019, and September 17, 2019. In each instance the measured emission rate of lead and manganese exceeded the allowed emission limit as documented in the table below:

	August 2019 (pph)	September 2019 (pph)	December 2019 (pph)
Mn ESP	0.22	0.16	0.17
Mn Secondary BH	0.014	0.004	0.0057
Total Mn	0.23	0.16	0.18
Permit Limit	0.1	0.1	0.1
Pb ESP	0.0921	0.141	0.12
Pb Secondary BH	0.0025	0.017	0.0025
Total Pb	0.095	0.158	0.123
Permit Limit	0.067	0.067	0.067

Each of the three measured emission rates for lead and manganese represents a violation of MI-ROP-A8640-2016a, FGBOFSHOP, SC I.10 and SC I.12 respectively. The violations associated with the August 13-14 and September 17 testing events have been previously documented by the AQD in Violation Notices of November 18, 2019 and November 26, 2019 respectively.

Further, it is noted in each case that the measured emissions from the ESP stack, alone, exceed the permitted emission limit for the combined stacks.

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, GC 11 state, in part, that a person "shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity."

During the August 2019 stack test, a certified Method 9 reader performed visible emissions readings of the ESP stack. Those readings were enclosed in the test report. On August 14, 2019, from 3:25:15 PM to 3:31:00 PM, the 6-minute average opacity was

Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 4  
 March 16, 2020

30%. This is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

Additionally, AK Steel is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, AK Steel is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. Opacity exceedances reported by AK Steel are summarized in the table below, after correcting for the exception allowed within R 336.1301(1)(a): "one 6-minute average per hour of not more than 27% opacity."

	Number of COMS opacity exceedances per quarter			
	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
2015				19
2016	127	31	33	125
2017	63	16	18	28
2018	90	41	49	92
2019	313	145	47	65

Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, failed stack tests, and annual inspection report findings, the ESP is not being maintained and operated in a satisfactory manner. As such, AK Steel is in violation of MI-ROP-A8640-2016a, EUBOF, SC IV.1, and R 336.1910.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by April 6, 2020 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

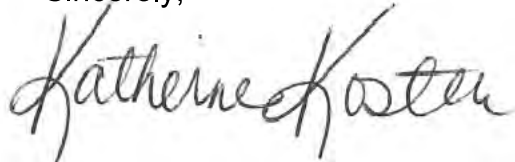
Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 5  
March 16, 2020

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katherine Koster". The signature is written in a cursive style with a large, prominent 'K' at the beginning.

Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Ms. Jenine Camilleri, EGLE  
Mr. Christopher Ethridge, EGLE  
Dr. April Wendling, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

July 15, 2020

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On July 6, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 1<sup>st</sup> quarter of 2020 for AK Steel Dearborn Works (AK Steel hereafter) located at 4001 Miller Road, Dearborn, Michigan. The report was received on May 12, 2020. Staff reviewed the report to determine AK Steel’s compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)	The quarterly COMS opacity report for the 1 <sup>st</sup> quarter of 2020 contained 71 exceedances of the 20% 6 minute average opacity limit at the ESP stack.
EUBOF	ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1;  R 336.1910	The ESP has ongoing exceedances of the 20% 6 minute average opacity limit as recorded by the COMS.  This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance with the rules and existing law.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 2  
July 15, 2020

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, GC 11 state, in part, that a person “shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.”

AK Steel is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, AK Steel is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. For the 1<sup>st</sup> quarter of 2020, after correcting for the exception allowed within R 336.1301(1)(a): “one 6 minute average per hour of not more than 27% opacity” and excluding calibration checks, there were 71 exceedances reported. Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

ROP No. MI-ROP-A8640-2016a, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with these rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, the ESP is not being maintained and operated in a satisfactory manner. As such, AK Steel is in violation of MI-ROP-A8640-2016a, EUBOF, SC IV.1, and R 336.1910.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by August 5, 2020 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

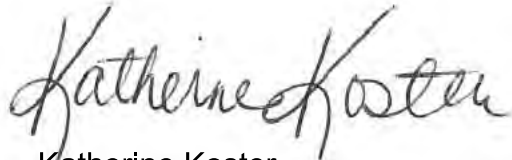
Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If AK Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 3  
July 15, 2020

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katherine Koster". The signature is written in a cursive style with a large, prominent 'K' and 'K'.

Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

January 5, 2021

Mr. LaDale Combs, General Manager  
AK Steel Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear Mr. Combs:

**VIOLATION NOTICE**

On November 30, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) opacity report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 3rd quarter of 2020 for AK Steel Dearborn Works (AK Steel hereafter) located at 4001 Miller Road, Dearborn, Michigan. The report was received on October 30, 2020. Staff reviewed the report to determine AK Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on the quarterly COMS opacity reports, including the 3<sup>rd</sup> quarter 2020 report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)	The quarterly COMS opacity report for the 3 <sup>rd</sup> quarter of 2020 contained 29 exceedances of the 20% 6 minute average opacity limit at the ESP stack.



Mr. LaDale Combs  
 AK Steel Dearborn Works  
 Page 2  
 January 5, 2021

EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1;  R 336.1910	The ESP has ongoing exceedances of the 20% 6 minute average opacity limit as measured and recorded by the COMS.  This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance with the rules and existing law.
EUBOF	ROP No. MI-ROP- A8640-2016a, Section 1, GCs 19, 21, and 23;  R 336.1213(3)(c);  R 336.1213(4)(c)	From the 4 <sup>th</sup> quarter of 2015 through the 1 <sup>st</sup> quarter of 2020, each quarterly COMS opacity report contains exceedances of the 20% 6-minute average opacity limit from the ESP stack yet these exceedances are not identified as deviations in the semi-annual and annual ROP certifications.  This is a failure by the Responsible Official to accurately and completely report deviations which should have been reported.

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11 state, in part, that a person “shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.”

AK Steel is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, AK Steel is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. For the 3<sup>rd</sup> quarter of 2020, after correcting for the exception allowed within R 336.1301(1)(a): “one 6 minute average per hour of not more than 27% opacity” and excluding calibration checks, there were 29 exceedances reported. Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11. It should be noted that the BOF and ESP were not in operation until July 27, 2020 of the third quarter.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 3  
January 5, 2021

ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with the AQD rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, the ESP is not being maintained and operated in a satisfactory manner. As such, AK Steel is in violation of MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1, and R 336.1910.

Furthermore, COMS measurements are a direct compliance method for opacity as allowed in R 336.1303 and in the Integrated Iron and Steel MACT. As such, the opacity exceedances as measured by COMS represent violations which are deviations from the ROP requirements. AQD rules R 336.1213(3)(c) and R 336.1213(4)(c) require the reporting of deviations not less than once every 6 months, and annually, and the report to be certified by the facility's responsible official for its truth, accuracy, and completeness after reasonable inquiry. These requirements are also incorporated into the ROP at GCs 19, 21, and 23. None of the exceedances identified in the quarterly COMS reports, starting in the 4<sup>th</sup> quarter of 2015 through the 1<sup>st</sup> quarter of 2020 are included in the semi-annual or annual deviation reports. Therefore, the AQD concludes the Responsible Official failed to submit accurate and complete reports.

Notwithstanding this position, at a minimum, COMS opacity exceedances represent credible evidence and "any other material information" as referenced in 40 CFR 70.6(c)(5)(iii)(B) that are required to be assessed through reasonable inquiry when certifying compliance on a semi-annual and annual basis. However, in each instance where the COMS recorded an opacity exceedance and the facility subsequently determined that the exceedance was not cause by steam interference, the facility failed to take any further action to determine the BOF ESP's compliance with Rule 336.1301. Due to the failure to perform reasonable inquiry, each exceedance represents a violation of Rule 336.1301(1)(a) and should have been reported in the semi-annual and annual deviation reports. Therefore, in this scenario, the AQD also concludes that the Responsible Official failed to submit accurate and complete reports.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by January 26, 2021 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Ms. Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

Mr. LaDale Combs  
AK Steel Dearborn Works  
Page 4  
January 5, 2021

If AK Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katherine Koster". The signature is written in a cursive style with a large, prominent 'K' at the beginning.

Katherine Koster  
Environmental Engineer Specialist  
Air Quality Division  
313-456-4678

cc: Ms. Mary Ann Dolehanty, EGLE  
Dr. Eduardo Olaguer, EGLE  
Mr. Christopher Ethridge, EGLE  
Ms. Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Mr. Jeff Korniski, EGLE  
Mr. Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

August 2, 2022

LaDale Combs, General Manager  
Cleveland Cliffs Dearborn Works  
4001 Miller Road  
Dearborn, Michigan 48121-1699

SRN: A8640, Wayne County

Dear LaDale Combs:

**VIOLATION NOTICE**

On August 1, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), completed review of the quarterly continuous opacity monitoring system (COMS) opacity report for the basic oxygen furnace (BOF) electrostatic precipitator (ESP) for the 1<sup>st</sup> quarter of 2022 for Cleveland Cliffs Dearborn Works (Cliffs hereafter) located at 4001 Miller Road, Dearborn, Michigan. Staff reviewed the report to determine Cliffs' compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; and Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a.

Based on review of the aforementioned report, the following air pollution violations were observed:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, General Condition (GC) 11;  R 336.1301(1)(a)	The quarterly COMS opacity report for the 1st quarter of 2022 contained 67 exceedances of the 20% 6 minute average opacity limit at the ESP stack.
EUBOF	ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1;  R 336.1910	The ESP has ongoing exceedances of the 20% 6 minute average opacity limit as measured and recorded by the COMS.  This is a failure to operate and maintain the air cleaning device in a satisfactory manner and in accordance with the rules and existing law.

LaDale Combs  
Cleveland Cliffs Dearborn Works  
Page 2  
August 2, 2022

R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11 state, in part, that a person “shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: a 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.”

Cliffs is required to maintain and operate a COMS in the ESP stack. Per Consent Decree Civil Action No. 15-cv-11804, VI.B.20, Cliffs is required to submit quarterly COMS data reports. Reports include each instance in which the 6-minute block average reading of opacity by the COMS exceeds 20%. For the 1st quarter of 2022, after correcting for the exception allowed within R 336.1301(1)(a): “one 6 minute average per hour of not more than 27% opacity” and excluding calibration checks and concurrent Method 9 readings indicating compliance, there were 67 exceedances reported. Each of these exceedances is a violation of R 336.1301(1)(a) and ROP No. MI-ROP-A8640-2016a, Section 1, GC 11.

ROP No. MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1 requires that the permittee shall not operate EUBOF unless the ESP is installed and operating properly. Similarly, R 336.1910 requires that an air-cleaning device be installed, maintained, and operated in a satisfactory manner and in accordance with the AQD rules and existing law. The ESP is an air-cleaning device. Based on the continuing opacity exceedances, the ESP is not being maintained and operated in a satisfactory manner. As such, Cliffs is in violation of MI-ROP-A8640-2016a, Section 1, EUBOF, SC IV.1, and R 336.1910.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by August 23, 2022 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If Cliffs believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

LaDale Combs  
Cleveland Cliffs Dearborn Works  
Page 3  
August 2, 2022

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

*Katherine Koster*

Katherine Koster  
Environmental Engineer Specialist  
Air Quality Division  
313-456-4678

cc: Mary Ann Dolehanty, EGLE  
Annette Switzer, EGLE  
Christopher Ethridge, EGLE  
Brad Myott, EGLE  
Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Jeff Korniski, EGLE  
Jonathan Lamb, EGLE



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
DETROIT DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

December 19, 2022

LaDale Combs, General Manager  
Cleveland-Cliffs Steel Corporation Dearborn Works  
4001 Miller Road  
Dearborn, MI 48121-1699

SRN: A8640, Wayne County

Dear LaDale Combs:

**VIOLATION NOTICE**

On December 11, 2022, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), investigated a complaint about visible emissions from Cleveland-Cliffs Steel Corporation Dearborn Works (Cleveland-Cliffs) located at 4001 Miller Road, Dearborn, Michigan. The purpose of this investigation was to determine Cleveland-Cliffs' compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; the conditions of Renewable Operating Permit (ROP) number MI-ROP-A8640-2016a; and to investigate a complaint received on December 11, 2022, regarding visible emissions attributed to Cleveland-Cliffs' operations.

During the investigation, Jonathan Lamb of the AQD performed Method 9 visible emission (VE) readings of the Basic Oxygen Furnace (BOF) Shop building and noted the following violation:

Process Description	Rule/Permit Condition Violated	Comments
EUBOF Shop building	MI-ROP-A8640-2016a - Section 1, EUBOF, S.C. 1.2;  40 CFR Part 63 Subpart FFFFF, Table 1.12	Visible emissions exceeded 20% over a 3-minute average. The highest 3-minute average was 64.2%

Jonathan Lamb performed Method 9 VE readings of the EUBOF Shop building from approximately 1:43 PM to 2:45 PM on December 11, 2022. During the time period in which the Method 9 readings were performed, the 3-minute average opacity exceeded the 20% opacity limit allowed in ROP No MI-ROP-A8640-2016a – Section 1, EUBOF, Special Condition 1.2 and 40 CFR Part 63 Subpart FFFFF, Table 1.12, a total of five times, with a high of 64.2% from 1:44 PM to 1:46 PM. Copies of the Method 9 VE readings are included with this letter.

LaDale Combs  
Cleveland-Cliffs  
Page 2  
December 19, 2022

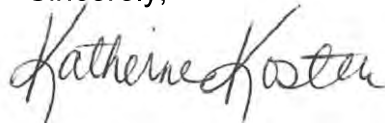
Please initiate actions necessary to correct the cited violation and submit a written response to this Violation Notice by January 9, 2023 (which coincides with 21 calendar days from the date of this letter). The written response should include: the date the violation occurred; an explanation of the causes and duration of the violation; whether the violation is ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violation and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to EGLE, AQD, Detroit District, at 3058 West Grand Boulevard, Suite 2-300, Detroit, Michigan 48202 and submit a copy to Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If Cleveland-Cliffs believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violation cited above. If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in cursive script that reads "Katherine Koster".

Katie Koster  
Senior Environmental Engineer  
Air Quality Division  
313-418-0715

Enclosure

cc: Annette Switzer, EGLE  
Christopher Ethridge, EGLE  
Brad Myott, EGLE  
Jenine Camilleri, EGLE  
Dr. April Wendling, EGLE  
Jeff Korniski, EGLE  
Jonathan Lamb, EGLE



**FGBOFSHOP Roof Monitor Opacity Emissions**

**Exceeding 15% Opacity Limit  
(October 15, 2015 – November 9, 2022)**

<b>Date</b>	<b>Start Time</b>	<b>Opacity (Avg.)</b>	<b>Duration of Violation</b>	
10/15/2015	8:51:45	16%	3-minutes	FGBOF Roof Monitor
10/15/2015	8:51:45	16%	3-minutes	FGBOF Roof Monitor
4/23/2016	7:18:45	16%	3-minutes	FGBOF Roof Monitor
10/4/2016	9:53:45	16%	3-minutes	FGBOF Roof Monitor
11/4/2016	9:01:30	16%	3-minutes	FGBOF Roof Monitor
7/27/2017	10:08:15	19%	3-minutes	FGBOF Roof Monitor
7/27/2017	10:11:15	17%	3-minutes	FGBOF Roof Monitor
8/16/2017	9:40:15	17%	3-minutes	FGBOF Roof Monitor
8/16/2017	11:06:45	19%	3-minutes	FGBOF Roof Monitor
2/1/2018	11:10:45	16%	3-minutes	FGBOF Roof Monitor
2/21/2018	9:46:00	17%	3-minutes	FGBOF Roof Monitor
7/23/2018	14:20:00	16%	3-minutes	FGBOF Roof Monitor
7/23/2018	14:23:00	15%	3-minutes	FGBOF Roof Monitor
9/13/2018	10:41:00	16%	3-minutes	FGBOF Roof Monitor
2/8/2019	9:33:00	16%	3-minutes	FGBOF Roof Monitor
2/8/2019	10:41:00	16%	3-minutes	FGBOF Roof Monitor
2/20/2019	9:22:00	16%	3-minutes	FGBOF Roof Monitor
2/28/2019	15:43:00	17%	3-minutes	FGBOF Roof Monitor
5/14/2019	8:29:00	16%	3-minutes	FGBOF Roof Monitor
5/14/2019	8:32:45	17%	3-minutes	FGBOF Roof Monitor
7/1/2019	14:16:30	16%	3-minutes	FGBOF Roof Monitor
7/1/2019	14:19:30	16%	3-minutes	FGBOF Roof Monitor
12/23/2019	12:26:15	16%	3-minutes	FGBOF Roof Monitor
1/30/2020	10:00:00	16%	3-minutes	FGBOF Roof Monitor
9/22/2020	9:14:15	16%	3-minutes	FGBOF Roof Monitor
3/03/2021	9:42:45	16%	3-minutes	FGBOF Roof Monitor
10/27/21	10:09:30	25%	3-minutes	FGBOF Roof Monitor
10/27/21	10:12:30	52%	3-minutes	FGBOF Roof Monitor
11/9/21	10:46:45	16%	3-minutes	FGBOF Roof Monitor
2/7/22	13:36:00	16%	3-minutes	FGBOF Roof Monitor
11/9/22	9:22:30	16%	3-minutes	FGBOF Roof Monitor

**EUBOF Roof Monitor Opacity Emissions**  
**Exceeding 20% Opacity Limit**  
**(February 1, 2016 – January 26, 2023)**

<b>Date</b>	<b>Start Time</b>	<b>Opacity (Avg.)</b>	<b>Duration of Violation</b>	<b>Source</b>
2/1/2016	9:06:30	22%	3-minutes	EUBOF Roof Monitor
3/21/2016	9:28:30	21%	3-minutes	EUBOF Roof Monitor
5/16/2016	9:00:30	21%	3-minutes	EUBOF Roof Monitor
6/30/2016	13:35:00	22%	3-minutes	EUBOF Roof Monitor
11/4/2016	9:52:15	22%	3-minutes	EUBOF Roof Monitor
11/4/2016	9:55:15	23%	3-minutes	EUBOF Roof Monitor
4/13/2017	11:07:45	21%	3-minutes	EUBOF Roof Monitor
6/12/2017	7:47:45	22%	3-minutes	EUBOF Roof Monitor
7/27/2017	10:08:30	22%	3-minutes	EUBOF Roof Monitor
8/16/2017	11:07:00	22%	3-minutes	EUBOF Roof Monitor
2/20/2019	9:22:30	23%	3-minutes	EUBOF Roof Monitor
2/28/2019	15:43:15	22%	3-minutes	EUBOF Roof Monitor
5/14/2019	9:22:00	24%	3-minutes	EUBOF Roof Monitor
7/1/2019	14:17:00	23%	3-minutes	EUBOF Roof Monitor
2/5/2020	9:11:30	23%	3-minutes	EUBOF Roof Monitor
2/5/2020	9:14:30	36%	3-minutes	EUBOF Roof Monitor
6/4/2021	14:44:15	22%	3-minutes	EUBOF Roof Monitor
6/4/2021	14:47:15	23%	3-minutes	EUBOF Roof Monitor
6/04/2021	14:50:15	19%	3-minutes	EUBOF Roof Monitor
8/18/2021	9:09:15	16%	3-minutes	EUBOF Roof Monitor
9/1/2021	14:16:00	21%	3-minutes	EUBOF Roof Monitor
10/27/21	10:09:30	25%	3-minutes	EUBOF Roof Monitor
10/27/21	10:12:30	52%	3-minutes	EUBOF Roof Monitor
1/26/23	9:52:00	21%	3-minutes	EUBOF Roof Monitor

## APPENDIX G

### SUPPLEMENTAL ENVIRONMENTAL PROJECT

#### South Dearborn Neighborhood Residential Indoor Air Quality Project

##### I. DESCRIPTION

The purpose of the South Dearborn Neighborhood Residential Indoor Air Quality Project (“Project”) is to improve indoor air quality in residential dwellings in the geographic area of the City of Dearborn depicted in Exhibit 1 (“South Dearborn”). The Project includes two components: (1) the purchase and delivery of one air purifier unit to each residential dwelling in South Dearborn; and (2) educational outreach on the benefits of improved indoor air quality. The Project will benefit residents of South Dearborn by improving indoor air quality through the capturing of indoor airborne particles such as dust, pollen, pet dander and mold spores.

Cleveland-Cliffs Steel Corporation (“Defendant”) worked closely with a neighborhood association, Concerned Residents for South Dearborn (“CRSD”), and others in the community in developing the Project. Defendant, working with CRSD, identified approximately 1,117 residential dwellings (*e.g.*, houses and apartments) in South Dearborn for which Defendant will purchase and deliver air purifier units under the Project. Defendant plans to use CRSD as Defendant’s contractor to purchase and deliver the air purifier units and to conduct the educational outreach on the benefits of improved indoor air quality.

##### II. SCOPE OF WORK

1. Defendant shall purchase and deliver a home air purifier to each of the approximately 1,117 residential dwellings in South Dearborn. The model of air purifier unit shall meet the minimum specifications of (1) including a HEPA filter; (2) ability to purify a room of 300 square feet; (3) ability to filter volatile organic compounds (VOCs); and (4) capability to filter 99.0% or more allergens. An example includes the “Honeywell True HEPA Large Room Air Purifier with Allergen Remover, HPA 200” or a similar type. If Defendant has made reasonable efforts to deliver a unit to a residential dwelling (including multiple delivery attempts) but delivery has been unsuccessful, then Defendant shall return the unit and obtain a refund of the purchase price, which shall be paid to the General Fund of the State of Michigan pursuant to Section IV (Estimated Cost and Actual Cost) below.

2. Defendant shall conduct educational outreach in South Dearborn on the benefits of improved indoor air quality, including:

- Disseminating information packets (*e.g.*, flyers) on air quality, the importance of purifying the air inside the home, and the type, function, and maintenance of the air purifier unit. Dissemination of information packets shall occur in at least two rounds. The first round of information packets shall be distributed before delivery of air purifier units and a second round shall be distributed concurrent with or after delivery of air purifier units.

- Conducting at least two educational presentations on air quality, the importance of purifying the air inside the home, and the type, function, and maintenance of the air purifier unit. These presentations may be in-person or virtual.

3. Defendant shall maintain copies of receipts and delivery notices for each purchased and delivered air purifier, and receipts and invoices on the educational outreach.

4. Reporting

Defendant shall provide quarterly Project status reports to EGLE within 30 days after the conclusion of each calendar quarter, starting after the Effective Date of the Consent Decree Modification. The Project status reports shall include the following: (1) number of air purifiers ordered, along with supporting documentation; (2) number of air purifiers delivered, along with supporting documentation; (3) expenses incurred for purchase and delivery of air purifiers, along with supporting documentation; (4) a summary of any implemented educational component, along with copies of any prepared written material.

Defendant shall provide quarterly Project status reports until completion of the Project. At that time, Defendant shall provide a SEP Completion Report in accordance with the Consent Decree Modification.

### **III. SCHEDULE**

Defendant shall complete the Project within one year of the Effective Date of this Consent Decree Modification.

### **IV. ESTIMATED COST AND ACTUAL COST**

The estimated cost of the Project consists of the following:

Air purifier units: approximately \$225 per unit x approximately 1,117 housing units = \$251,000

Educational outreach: approximately \$3,000

If the actual cost to implement the Project is less than \$244,000, then Defendant shall pay to the General Fund of the State of Michigan, pursuant to Paragraph 3 of the Consent Decree Modification, the difference between \$244,000 and the actual cost to implement the Project. Defendant shall make the payment within 30 days after completion of the Project.

**Exhibit 1**  
**to Appendix G – Supplemental Environmental Project**

