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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 superseded 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.

## 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.

## 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.

**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. 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.

#### 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.

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

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.

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 Paragraph 23) 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 Paragraph 23) 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 Paragraph 23) 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.

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 Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing, sent by U.S. Mail (and also by electronic mail where provided), and addressed as follows:



As to the United States (by email): [eescasemanagement.enrd@usdoj.gov](mailto: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): Kasey Barton  
Associate Regional Counsel  
Environmental Protection Agency, Region 5  
77 West Jackson Blvd. (C-14J)  
Chicago, IL 60604-3590  
(312) 886-7163  
[Barton.kasey@epa.gov](mailto:Barton.kasey@epa.gov)

and

Daniel Schaufelberger  
Environmental Scientist  
Environmental Protection Agency, Region 5  
77 West Jackson Blvd. (AE-17J)  
Chicago, IL 60604-3590  
(312) 886-4044  
[schaufelberger.daniel@epa.gov](mailto:schaufelberger.daniel@epa.gov)

As to MDEQ (by mail and email): Neil D. Gordon  
Michigan Department of Attorney General  
Environment, Natural Resources  
and Agriculture Division  
P.O. Box 30755  
Lansing, MI 48909  
[Gordonn1@michigan.gov](mailto:Gordonn1@michigan.gov)

and

Michael Kovalchick  
Michigan Department of Environmental Quality  
Air Quality Division

P.O. Box 30260  
Lansing, MI 48909  
(517) 284-6769  
kovalchickm@michigan.gov

As to Defendant (by mail and email): 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)

and

David Miracle  
AK Steel Corporation  
9227 Centre Point Drive  
West Chester, Ohio 45069  
(513) 425-5000  
[dave.miracle@aksteel.com](mailto:dave.miracle@aksteel.com)

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.

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

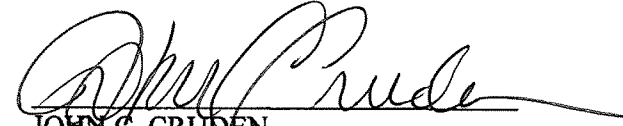
Dated and entered this \_\_\_ day of \_\_\_\_\_, 2015


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UNITED STATES DISTRICT JUDGE

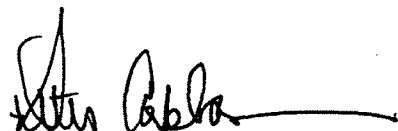
FOR THE UNITED STATES OF AMERICA:

5/19/2015  
Date

  
JOHN C. CRUDEN  
Assistant Attorney General  
Environment and Natural Resources Division  
U.S. Department of Justice

  
MICHAEL J. ZOELLER  
Trial Attorney  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
Washington, DC 20044-7611  
Tel: (202) 305-1478  
Fax: (202) 616-6584  
Email: michael.zoeller@usdoj.gov

BARBARA L. McQUADE  
United States Attorney  
Eastern District of Michigan

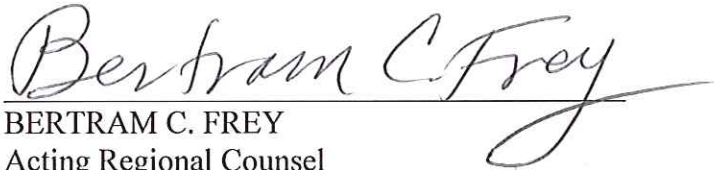
  
PETER CAPLAN  
Assistant United States Attorney  
Eastern District of Michigan  
211 West Fort Street, Suite 2001  
Detroit, MI 48226  
Tel: (313) 226-9784  
Fax: (313) 226-3800  
P30643  
Email: peter.caplan@usdoj.gov

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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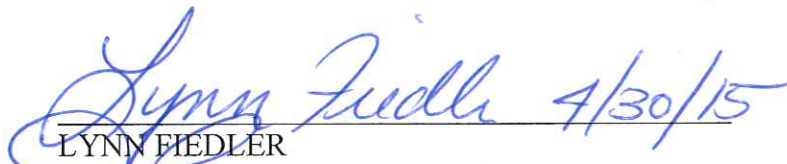
KASEY BARTON  
LOUISE GROSS  
Associate Regional Counsel  
U.S. Environmental Protection Agency, Region 5  
Office of Regional Counsel  
77 West Jackson Blvd.  
Chicago, IL 60604-3507  
(312) 886-7163

FOR THE MICHIGAN DEPARTMENT OF  
ENVIRONMENTAL QUALITY:

BILL SCHUETTE  
Attorney General

 4/30/15

NEIL D. GORDON  
Assistant Attorney General  
Michigan Department of Attorney General  
Environment, Natural Resources and Agriculture Division  
P.O. Box 30755  
Lansing, MI 48909  
(517) 373-7540

 4/30/15

LYNN FIEDLER  
Chief, Air Quality Division  
Michigan Department Environmental Quality  
P.O. Box 30260  
Lansing, MI 48909  
(517) 284-6773



FOR AK STEEL CORPORATION:

4/10/15

Date



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

## **Index to Appendices**

Appendix A: List of Violation Notices and Notices of Violation

Appendix B: Compliance-Focused Environmental Management System Elements

Appendix C: Operations & Maintenance Plan for the BOF ESP

Appendix D: Fugitive Dust Control Plan for Slag Handling

Appendix E: Supplemental Environmental Project

## APPENDIX A

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

<b><u>VN or NOV Date</u></b>	<b><u>Authority</u></b>	<b><u>VN or NOV Date</u></b>	<b><u>Authority</u></b>
8/12/2008	MDEQ	1/30/2013	MDEQ
10/06/2008	MDEQ	3/5/2013	EPA
2/24/2009	MDEQ	3/8/2013	MDEQ
4/23/2009	MDEQ	3/27/2013	MDEQ
7/17/2009	MDEQ	5/13/2013	MDEQ
10/7/2009	MDEQ	4/15/2014	MDEQ
10/28/2009	MDEQ	9/2/2014	MDEQ
1/6/2010	MDEQ	10/27/2014	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		

## 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**

# **OPERATION AND MAINTENANCE PLAN**

**BOF**

**ELECTROSTATIC PRECIPITATOR (ESP)**

**AK STEEL DEARBORN WORKS**

**May 22, 2006**

**Revised March 30, 2015**

**ED-PL-W-20-01**

## **AK Steel – Dearborn Works BOF Electrostatic Precipitator (ESP) Operations and Maintenance Plan: Roadmap**

**Purpose:** This plan provides a roadmap to the Operations and Maintenance (O & M) procedures for the BOF Electrostatic Precipitator (ESP). This plan is intended to satisfy the requirements of the Integrated Iron and Steel Maximum Achievable Control Technology (MACT) rules to have a written plan pursuant to 40 CFR 63.7800(b) and 40 CFR 63.6(e)(1)(i). This plan also satisfies Permit No. 182-05C requirement EUBOF III.1. The roadmap directs interested parties to the appropriate written operational control document contained in the facility document management system. Revisions to the operational control documents are not considered revisions to this O & M Plan. These procedures describe O & M of the source and the pollution control equipment (electrostatic precipitator) to comply with the relevant MACT rules. The referenced procedures are intended to provide direction to operate and maintain affected sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, at least to the levels required by the relevant standard. This plan, if implemented correctly, will also reduce the reporting burden associated with these periods.

**1. Detailed Procedures:** The facility will operate and maintain the source and associated air pollution control equipment in accordance with the procedures specified in the O & M plan as contained herein:

Procedure	Reference
1. <b>Preventative maintenance (PM) for the BOF ESP.</b> A PM schedule must be developed consistent with the manufacturer's instructions for routine and long-term maintenance. These requirements are pursuant to 40 CFR 63.7800(b)(2).	45531 – Mech – Inspection – 1212: (ID Fan 1 mechanical inspection)
	45532 – Mech – Inspection – 2212: (ID Fan 2 mechanical inspection)
	45533 – Mech – Inspection – 3212: (ID Fan 3 mechanical inspection)
	45534 – Mech – Inspection – 4212: (ID Fan 4 mechanical inspection)
	45500 –Mech– Inspection – 222: (Precipitator Roof (Rapper) electrical inspection)
	45500 – Elec – Inspection – 223 – SCH: (Precipitator conveyer(s) electrical inspection)
	45501 - Mech- Inspection – 3213- SCH: (Precipitator conveyer

Procedure	Reference
	<p>mechanical inspection)</p> <p>45560 – Elec – Inspection – 1 – SCH: (Downcomer draft transmitter inspection)</p> <p>42547 – Mech – Repetitive – 8: Millwater strainer cleaning, 2<sup>nd</sup> floor mechanical room and 1<sup>st</sup> floor behind MG Room)</p> <p>ESP Quarterly CPMS Damper Inspection form</p>
<p>2. <b>ESP Continuous Opacity Monitor System (COMS) corrective action procedure.</b>                      In the event emissions from an ESP equipped with a COMS exceeds a six minute average opacity of 15 percent, an investigation as to the cause of the opacity must be completed. This investigation includes the following:</p> <ul style="list-style-type: none"> <li>• Prompt assessment by the ESP operator upon occurrence of opacity above 15% as to whether immediate corrective action is warranted.</li> <li>• Prompt completion by the ESP operator of the Checksheet for 6-Minute Opacity (PO-B2-80-78E-1) to make an initial assessment of root cause of opacity above 15%.</li> <li>• Periodic completion of the 6-Minute Average Opacity Investigation Spreadsheet (PO-B2-81-99E-2) at least once per week to evaluate and assess trends and root causes of opacity above 15%.</li> </ul> <p>In the event emissions from an ESP equipped with a COMS exceeds an hourly average opacity of 10 percent, corrective action must be initiated within one hour to determine the cause of the alarm. Corrective action must be initiated within 24 hours to correct the cause of the problem, and the corrective action must be completed as soon as practicable. These requirements are pursuant to 40 CFR 63.7833(g).</p>	<p>PO-B2-81-99E (ESP 15% 6-Minute Opacity Investigation Procedure)</p> <p>PO-B2-80-78E (15% 6-Minute ESP Operator Alarm Response)</p> <p>PO-B2-81-98E (ESP 10% One Hour Elevated Opacity Investigation Procedure)</p>
<p>3. <b>BOF ESP system inspection procedures.</b> The</p>	

Procedure	Reference
<p>following equipment shall be inspected at intervals of <b>no less than monthly</b>. The procedures provide how to evaluate each component and to repair, replace or isolate each component. If established procedures are not followed, excess emission, repeated failure, or further damage could result. A record of each inspection will be maintained for 5 years.</p> <p>a. Hoods, ductwork, dampers, and expansion joints. Monthly inspections of the equipment that is important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan also must include requirements to repair any defect or deficiency in the capture system before the next scheduled inspection. These requirements are pursuant to 40 CFR 63.7800(b)(1).</p> <p>Initiate Corrective Action Procedure for monthly required inspections. These requirements are pursuant to 40 CFR 63.6(e)(1)(i) and 63.7830(a). <b>Corrective Action:</b> The Integrated Iron and Steel MACT rules do not address a specific time for initiating and completing corrective actions regarding issues identified during preventative maintenance inspections. Dearborn Works’ policy is to address such corrective actions as soon as practical (and may want to include capture systems corrective actions prior to the next monthly inspection.). The BOF cannot operate when the ESP is not in operation.</p> <p>Inspection recordkeeping and certification procedures. A record of each inspection will be kept for 5 years. These requirements are pursuant to 40 CFR 63.7842(a)(3) and 63.7843(b).</p>	<p>45500 – Mech – Inspection – 1214: Precipitator weekly pollution inspection</p> <p>Boiler Pulpit Readings</p> <p>Vibration Analysis</p> <p>ESP Operations Shift Checksheet</p> <p>PO-B2-00-12E (Environmental Inspection Corrective Action Follow-Up Procedure)</p>
<p>4. <b>Off-Gas Conditioning System (Required to be included in this plan by EUBOF III.1 of Permit</b></p>	<p>PO-B2-80-71E Boiler/Precipitator Spray System Operation: PO-B2-81-</p>

Procedure	Reference
<b>182-05C).</b> This system provides additional air-atomized water spray and must be maintained as part of the off gas conditioning system.	15E: Boiler/Precipitator Changing Spray H2O Set Points.

2. **Responsible Official (RO):** The person who is designated to have the overall responsibility for managing compliance to the Integrated Iron and Steel MACT rules and implementing the O & M procedures. This person is the signature authority for the records and reports as required in these plans. The RO for the plant is General Manager - Dearborn Works.
3. **Roles and Responsibilities:** The RO has delegated the responsibilities associated with the RO to the following position within the BOF: Steelmaking Department Manager.
4. **Training:** Personnel responsible for the air pollution control equipment must have adequate knowledge to operate, troubleshoot, maintain the air pollution control equipment as established in the Operating and Maintenance procedures. Each person must be trained on the tasks and responsibilities they are required to perform and a record of the training maintained in accordance with departmental procedures.
5. **Monitoring:** Fan draft (static pressure) at the bottom of the downcomer is the designated operational monitoring component of the continuous parametric monitoring system (CPMS). The COMS is also monitored and averaged on an hourly basis.
6. **Recordkeeping:** Specific recordkeeping requirements will be contained in each procedure, as appropriate. In general, files of all information required by the Integrated Iron and Steel MACT rules shall be maintained in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
7. **Reporting** COMS opacity deviations are required to be reported to the Agency on a periodic basis according to the Facility Title V permit or the Integrated Iron and Steel MACT rules schedule.

A. **REFERENCES:** 40 Code of Fed. Reg. Subpart FFFFF – 40 CFR 63.7780

## List of Manufacturer's Recommended BOF ESP Preventative Maintenance Procedures<sup>(1)</sup> with Incorporated Dearborn Works Preventative Maintenance Procedures

Original 1963 Recommended O&M	Is the 1963 Recommendation Applicable in 2015?	AK Steel Interpretation	Reference
<b>DAILY</b>			
"Take switchboard readings. (Preferably hourly, or at least once per shift)"	No	References outdated/obsolete technology. Data is displayed on computer screens.	Incorporated in "ESP Parameter/ Opacity Monitoring Check Sheet", "BOF Precip - E - Field Electric Readings"
"Check that all insulator compartments are receiving proper ventilation."	No	It is the opinion of AK Steel that the daily inspection requirement is excessive and should be conducted on a weekly basis.	Incorporated in "Weekly ESP Checks"
"A periodic check of the hopper and dust bin heater thermostats should be made to insure their proper functioning"	No	It is the opinion of AK Steel that the daily inspection requirement is excessive and should be conducted on a weekly basis.	Incorporated in "Weekly ESP Checks"

(1) Page 108 from ESP Operating Manual, Book 2.

Original 1963 Recommended O&M	Is the 1963 Recommendation Applicable in 2015?	AK Steel Interpretation	Reference
<b>WEEKLY</b>			
"Remove dust and foreign matter from electrical equipment."	Yes	Incorporated in procedure PO-B2-81-05E: Weekly Precipitator Filter Change Out.	-
"Check signal horn and signal lights to see that they are functioning properly."	No	References outdated/obsolete technology. Signal lights identified the starting of a heat so that the Operators would go back into the Pulpit.	The Pulpit is continuously staffed.
"Check operation of the dust valves and conveyors."	Yes	Incorporated in "ESP Parametric/Opacity Monitoring Checksheet"	-



## List of Controlled Operating and Maintenance Procedures and Forms

The following procedures listed in this plan serve as the required procedures and forms to comply with the Iron and Steel MACT rules for the BOF ESP.

Procedure	Reference
ID Fan 1 mechanical inspection	45531 - Mech - Inspection - 1212
ID Fan 2 mechanical inspection	45532 - Mech - Inspection - 2212
ID Fan 3 mechanical inspection	45533 - Mech - Inspection - 3212
ID Fan 4 mechanical inspection	45534 - Mech - Inspection - 4212
Precipitator Roof (Rapper) electrical inspection	45500 - Elec - Inspection - 222
Precipitator conveyor(s) electrical inspection	45500 - Elec - Inspection - 223 - SCH
Precipitator conveyor mechanical inspection	45501 - Mech - Inspection - 3213 - SCH
Downcomer draft transmitter inspection	45560 - Elec - Inspection - 1 - SCH
Millwater strainer cleaning, 2 <sup>nd</sup> floor mechanical room and 1 <sup>st</sup> floor behind MG Room)	42547 - Mech - Repetitive - 8
ESP Quarterly CPMS Damper Inspection	ESP Quarterly CPMS Damper Inspection Form
Investigation of >15% 6-Minute Opacity Alarm	PO-B2-81-99E
15% 6-Minute ESP Operator Alarm Response	PO-B2-80-78E
Investigation of >10% 1-Hour Opacity Alarm	PO-B2-81-98E
Precipitator weekly pollution inspection	45500 - Mech - Inspection - 1214
Boiler Pulpit Readings	PO-B2-81-23E-1
Verification of fan erosion / buildup	Monthly Vibration Report
ESP Operations Shift Checksheet	PO-B2-81-04E-2
Environmental Inspection Corrective Action Follow-Up Procedure	PO-B2-00-12E
Boiler/Precipitator Spray System Operation	PO-B2-80-71E
Boiler/Precipitator Changing Spray H <sub>2</sub> O Set Points	PO-B2-81-15E
ESP Parameter/Opacity Monitoring Checksheet	PO-B2-81-04E-1
BOF Precip E-Field Electric Readings	PO-B2-81-04E-4
Weekly Air Dryer and Hopper and Dust Bin Heater Check	Weekly ESP Electrician Checks
Weekly Precipitator Filter Change Out	PO-B2-81-05E

**REVISION TABLE**

<b>Date</b>	<b>Revision Comments</b>
May 22, 2006	Original Issue
October 15, 2007	Combined all MACT plans
April 15, 2011	Revised plan with new facility name
September 3, 2013	Plan revised by SNC Lavalin
June 24, 2014	Updated by SNC Lavalin
November 5, 2014	O & M Plan revised by AK Steel
January 12, 2015	Updated O & M Plan to include 15% 6-minute opacity procedure and fixed procedure numbers referenced in O & M plan.
March 30, 2015	Updated O & M Plan to include procedure for ESP Operators to follow in the event of a 6-minute 15% or greater COMS alarm (PO-B2-80-78E).

## 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>