

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings  
against **UNITED STATES STEEL  
CORPORATION**, a corporation organized  
under the laws of the State of Delaware and  
doing business at No. 1 Quality Drive in the  
City of Ecorse, County of Wayne, State of  
Michigan

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AQD No. 2020-11

SRN: A7809

STIPULATION FOR ENTRY OF FINAL ORDER  
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) against United States Steel Corporation (Company), a corporation organized under the laws of the State of Delaware and doing business at No. 1 Quality Drive in the City of Ecorse, County of Wayne, State of Michigan with State Registration Number (SRN) A7809 (Great Lakes Works Facility). EGLE alleges that the Company is in violation of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling – HCl Process Facilities and Hydrochloric Acid Regeneration Plants, Title 40 of the Code of Federal Regulations (CFR), Part 63, Subpart CCC; the NESHAP for Integrated Iron and Steel Manufacturing Facilities, 40 CFR, Part 63, Subpart FFFFF; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, MCL 324.5501 *et seq.*, and the administrative rules promulgated thereunder, and Renewable Operating Permit (ROP) No. 199600132d. Specifically, EGLE alleges that the Company has violated the following conditions of ROP No. 199600132d: failed to operate the No. 5 Pickle Line scrubber (EG5-PICKLE-LINE) at or above the required minimum recirculation and makeup water flow rates, exceeded the Hydrochloric Acid (HCl) emission limit for the No. 5 Pickle Line scrubber, and exceeded visible emission limits for opacity from the B2 Blast Furnace Casthouse Roof Monitor (EGBLAST-FCE-B), the B2 Blast Furnace Backdraft Stack (EGBLAST-FCE-B), the D4 Blast Furnace Slag Pits (FG-SLAG-PITS), the D4 Blast Furnace Backdraft Stack (EGBLAST-FCE-D), and the D4 Blast Furnace as cited herein and in the Violation Notices dated August 18, 2017; January 31, 2018; October 5, 2018; October 12, 2018; November 21, 2018; and July 19, 2019.

The Company and EGLE stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and EGLE stipulate as follows:

1. The Natural Resources and Environmental Protection Act (NREPA), MCL 324.101 *et seq.*, is an act that controls pollution to protect the environment and natural resources in this State.

2. Article II, Pollution Control, Part 55 of the NREPA (Part 55), MCL 324.5501 *et seq.*, provides for air pollution control regulations in this State.

3. Executive Order 2019-06 renamed the Michigan Department of Environmental Quality as EGLE, and EGLE and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.

4. The EGLE Director has delegated authority to the Director of the AQD (AQD Director) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55, MCL 324.5528, is proper and acceptable.

6. The Company and EGLE agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.

7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Director.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

#### COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9. Permit

A. On and after the effective date of this Consent Order, the Company shall comply with the HCl emission limits for the No. 5 Pickle Line scrubber in Section 1, Table E-01.08, Condition II.B of ROP No. 199600132d, as amended.

B. On and after the effective date of this Consent Order, the Company shall comply

with the visible emission limit for the B2 Blast Furnace Casthouse Roof Monitor in Section 1, Table E-01.13, Condition II.B of ROP No. 199600132d, as amended.

C. On and after the effective date of this Consent Order, the Company shall comply with the visible emission limit for the B2 Blast Furnace Backdraft Stack and the D4 Blast Furnace Backdraft Stack in General Condition 2.a of ROP No. 199600132d, as amended.

D. On and after the effective date of this Consent Order, the Company shall comply with the visible emission limit for the D4 Blast Furnace Slag Pits in Table B-1, Condition II.B.1 in ROP No. 199600132d, as amended.

#### 10. Testing

A. Within thirty (30) days after the effective date of this Consent Order, the Company shall submit a test plan for HCl from the No. 5 Pickle Line scrubber that meets the requirements specified in Exhibit A to the AQD Detroit District Supervisor and the AQD Technical Programs Unit Supervisor for review and approval prior to testing. A test plan shall be submitted for each subsequent test.

B. No later than forty-five (45) days following the AQD approval of a test plan submitted by the Company pursuant to paragraph 10.A, the Company shall conduct stack testing for HCl from the No. 5 Pickle Line scrubber. The Company shall conduct subsequent testing no later than every six (6) months from the date of the last test.

C. Within forty-five (45) days after a completed test, the Company shall submit to the AQD Detroit District Supervisor and the AQD Technical Programs Unit Supervisor, a test report, which includes the test data and results.

D. Not less than seven (7) days prior to any stack testing for HCl from the No. 5 Pickle Line scrubber pursuant to Paragraph 10.B, the Company or an authorized agent, shall notify the AQD Detroit District Supervisor and the AQD Technical Programs Unit Supervisor, in writing, of the time and place of the tests and who shall conduct them. A representative of the AQD shall have the opportunity to witness the tests.

E. After three (3) consecutive semi-annual testing (no later than every six (6) months from the date of the last test) events demonstrating compliance with the HCl emission limits from the No. 5 Pickle Line scrubber as specified in ROP No. 199600132d, as amended, the

Company shall conduct stack testing for HCl on the No. 5 Pickle Line scrubber no later than every twelve (12) to fifteen (15) months from the date of the last test.

F. If the Company is unable to test at maximum routine operating conditions for any test described in paragraph 10.B or 10.E above, the Company may submit a written request for extension no later than fourteen (14) days prior to the scheduled test date in the approved test plan to the AQD Detroit District Supervisor. The written request shall include the reason for the request and a proposed new test date. Any request for an extension shall not be unreasonably denied.

11. Operation and Maintenance

A. No. 5 Pickle Line

1. Within thirty (30) days after the effective date of this Consent Order, the Company shall submit, for review and approval to the AQD Detroit District Supervisor, revisions to the Operation and Maintenance Plan (OMP) for the No. 5 Pickle Line scrubber. The OMP shall identify additional preventative maintenance or other measures the Company will conduct to maintain compliance with the HCl emission limits for the No. 5 Pickle Line scrubber. The OMP shall also identify the number and location of all scrubber spray nozzles.

2. The OMP shall take effect upon written notice from the AQD Detroit District Supervisor or sixty (60) days after submittal, whichever is earlier. If within sixty (60) days of submittal of the OMP, the AQD Detroit District Supervisor provides written notice that the OMP is not adequate for its stated purposes, the Company shall resubmit the OMP to address the deficiency within thirty (30) days of the deficiency notice.

3. If the Company proposes subsequent revisions to the approved OMP, it shall follow the procedures in paragraph 11.A.2.

4. Upon approval of the OMP and any subsequent revisions, the Company shall implement the OMP as approved. The OMP shall be incorporated by reference into this Consent Order and shall be made an enforceable part of this Consent Order.

5. On and after the effective date of this Consent Order, the Company shall replace all spray nozzles on the No. 5 Pickle Line scrubber once every ninety (90) days of operation.

6. On and after the effective date of this Consent Order, the Company shall conduct an inspection of the No. 5 Pickle Line scrubber according to the schedule specified in ROP No. 199600132d, as amended, and correct any deficiencies observed during each inspection prior to the next scheduled inspection. The Company shall submit the No. 5 Pickle Line scrubber maintenance records, including any corrective actions conducted due to deficiencies observed during each inspection to the AQD Detroit District Supervisor within thirty (30) days after the end of each calendar quarter. Quarters shall end on March 31; June 30; September 30; and December 31. Records shall also include daily recirculation water flow, makeup water flow, and pressure drop values, and a record of the spray nozzle replacements.

B. Malfunction Abatement Plans

1. Within sixty (60) days after the effective date of this Consent Order, the Company shall submit the following Malfunction Abatement Plans (MAPs) to the AQD Detroit District Supervisor for review and approval:

2. A MAP for the B2 Blast Furnace Backdraft System;

3. A MAP for the D4 Blast Furnace Backdraft System;

4. A MAP for the mud gun at the B2 Blast Furnace Casthouse;

5. A MAP for the offgas collection system from the D4 Blast Furnace, including an inspection schedule;

6. A MAP for the D4 Blast Furnace Slag Pit water spray system, including the hydrogen peroxide system. The plan shall include a schedule for inspection, replacement, and maintenance of the water sprays to ensure proper functioning, drawings showing the number and location of all water sprays, and a schedule for inspection and maintenance of the hydrogen peroxide system. Any deficiencies noted shall be corrected before the next scheduled inspection as outlined in the MAP. The Company shall verify daily when the slag pit is in operation that the water spray and hydrogen peroxide system is fully operational and maintain records of the observations;

7. Each MAP shall take effect upon written approval from the AQD Detroit District Supervisor or sixty (60) days after submittal, whichever is earlier. If within sixty (60) days after submittal of the MAP, the AQD Detroit District Supervisor provides written notice that the

MAP is not adequate for its stated purposes, the Company shall resubmit the MAP to address the deficiency within thirty (30) days of the deficiency notice;

8. If the Company proposes subsequent revisions to an approved MAP, it shall follow the procedures outlined in paragraph 11.B.7; and

9. Upon approval of each MAP, the Company shall implement each MAP as approved and maintain the records and procedures demonstrating that each MAP is being implemented according to its terms and conditions. Each MAP and any subsequent revision to any MAP shall be incorporated by reference into this Consent Order and shall be made and enforceable part of this Consent Order.

C. Visible Emissions Readings

1. The Company shall conduct visible emissions readings using Method 9d at the D4 slag pit once per week for a minimum of thirty (30) minutes during slag pit digging and slag pit loading operations. If the weekly readings cannot be performed because the blast furnace is not operating, readings shall be completed within two (2) days after resuming operations and the Company shall document the reason why the weekly reading was not performed. The Company shall initiate appropriate corrective action if visible emissions exceeding the emission limit are observed during the certified visible emission observations. The Company shall keep a written record of each corrective action required.

2. The Company shall conduct visible emissions readings using Method 9 at the D4 Blast Furnace Casthouse Roof Monitor and B2 Blast Furnace Casthouse Roof Monitor once per week for a minimum of one complete cast for each blast furnace. If the weekly readings cannot be performed because the blast furnace is not operating, readings shall be completed within two (2) days after resuming operations and the Company shall document the reason why the weekly reading was not performed. The Company shall initiate appropriate corrective action if visible emissions exceeding the emission limit are observed during the certified visible emission observations. The Company shall keep a written record of each corrective action required.

3. The Company shall conduct visible emission readings using Method 9 at the B2 Blast Furnace Backdraft Stack and the D4 Blast Furnace Backdraft Stack as soon as practicable when each backdraft stack is in use. The readings shall occur as soon as practicable after the backdraft stack is opened and shall continue for thirty (30) minutes or after 24

consecutive readings are each below 10 percent opacity, whichever comes first. The Company shall initiate appropriate corrective action if visible emissions exceeding the emission limit are observed during the certified visible emission observations. The Company shall keep a written record of each corrective action required.

4. The Company shall submit quarterly opacity reports, including the readings and actions taken, if any, described in paragraphs 11.C.1, 11.C.2, and 11.C.3 to the AQD Detroit District Supervisor within thirty (30) days after the end of each quarter. Quarters shall end on March 31; June 30; September 30; and December 31. For any opacity exceedance observed, the report shall identify the root cause of each exceedance, when the root cause is unknown, provide a description of efforts taken to investigate the root cause, describe corrective actions taken in response to the root cause of each instance, and describe preventative action taken, if any, and actions to be taken, if any, to eliminate such instances that exceed opacity standards 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.

D. Spray system

1. No later than ninety (90) days after the effective date of this Consent Order the Company shall submit to the AQD Detroit District Supervisor for review and approval, a plan to upgrade the D4 slag pit spray system. The plan shall include the current pit spray configurations and proposed changes, an installation schedule, list of parts to be upgraded, operating parameters, and an inspection and maintenance schedule, and identify the appropriate personnel responsible for inspection and maintenance. Within forty-five (45) days of approval of the plan, the Company shall implement the plan.

2. Within forty-five (45) days after the completion of the D4 slag pit spray system upgrade, the Company shall provide a report of the D4 slag pit spray system upgrades to the AQD Detroit District Supervisor.

3. On and after the date of completion of the D4 slag pit spray system upgrade, the Company shall operate the spray system in accordance with the approved plan and maintain the inspection and maintenance records.

## 12. Idling of Operations

In the event the Company idles the No. 5 Pickle Line, B2 Blast Furnace or D4 Blast Furnace at the Great Lakes Works Facility, the Company may postpone performing the compliance requirements in Paragraphs 10 and 11 above, as applicable to the No. 5 Pickle Line, B2 Blast Furnace or D4 Blast Furnace that is idled and avoid the stipulated penalties that would otherwise accrue from those provisions, by notifying the AQD Detroit District Supervisor, in writing, at least fourteen (14) days before any such idle begins and at least five (5) days before any such idle ends. Any such postponement shall extend the applicable compliance requirement in Paragraphs 10 and 11 by one day for every one day that the No. 5 Pickle Line, B2 Blast Furnace, or D4 Blast Furnace was idled, except for the requirements in Paragraph 11.C, with which the Company shall comply immediately upon restart of the No. 5 Pickle Line, B2 Blast Furnace, or D4 Blast Furnace. For the purposes of this paragraph, "idle" means cessation of production at the No. 5 Pickle Line, B2 Blast Furnace, or D4 Blast Furnace for a period of thirty (30) days or more.

## SUPPLEMENTAL ENVIRONMENTAL PROJECT

13. In addition to the civil fine in this Consent Order for the violations alleged in the Violation Notices, the Company agrees to undertake the Supplemental Environmental Project (SEP) described in Exhibit B which is attached, incorporated by reference, and made an enforceable part of this Consent Order. Performance of the SEP will benefit the environment and the Company agrees to implement the SEP in accordance with the details specified in Exhibit B and in accordance with the following terms and conditions below:

A. The total expenditure for the SEP shall not be less than \$300,000.00. All costs of the SEP shall be the responsibility of the Company. The Company certifies that any economic benefit, including tax abatement(s), tax credit(s), or similar tax relief, that the Company will realize as a result of the SEP is detailed in Exhibit B. If the SEP is fully and completely implemented but the Company's actual expenditures for the SEP total less than \$300,000.00, then the Company shall pay to EGLE as a civil fine, within thirty (30) days after submission of the SEP certificate of completion required in subparagraph F below, the difference between the actual expenditures and \$300,000.00;

B. The plan included as Exhibit B contains schedules, including specific dates for the implementation of the SEP. The Company shall fully implement all aspects of the SEP within the specified schedules;

C. The Company further certifies that the Company has not received, and is not presently negotiating to receive, a credit for the SEP as part of any other enforcement action or any grant from the state, United States Environmental Protection Agency or any other entity. The Company also certifies that the Company will not seek tax benefits following completion of the SEP;

D. In the event the Company fails to fully and completely implement the SEP as provided herein to the reasonable satisfaction of EGLE, EGLE will provide written notice to the Company describing the nature of the deficiency. The Company shall have thirty (30) days from receipt of the notice to submit documentation to EGLE demonstrating that the deficiency has been corrected. In the event the deficiency is not corrected to the satisfaction of EGLE, the Company will be notified, and the Company shall be in violation of this Consent Order and required to pay a stipulated penalty of \$217,773.00 minus the Company's SEP expenditures documented to EGLE to date, to EGLE within thirty (30) days after notification from EGLE. The amount of the stipulated penalty may be reduced or waived by EGLE if the Company made good faith and timely efforts to complete the project. Payment of stipulated penalties under the terms of paragraph 17 shall satisfy the Company's obligation to complete the SEP(s) under this Consent Order;

E. The Company agrees that any public statement, oral or written, making reference to the SEP shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action taken by EGLE."; and

F. No later than thirty (30) days after the completion of all activities specified in Exhibit B, the Company shall submit written certification of completion of the SEP to the AQD Detroit District Supervisor demonstrating that all SEP activities specified in Exhibit B have been completed in accordance with the terms and conditions of this Consent Order and Exhibit B. The certification shall be accompanied by appropriate documentation (such as invoices, receipts, or tax statement) to verify the total expenditure made by the Company as a result of implementing the activities specified under Exhibit B. It shall be the sole determination of EGLE whether the Company has completely implemented the activities specified in Exhibit B of this Consent Order.

The Company reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a determination by EGLE of SEP completion is made.

#### GENERAL PROVISIONS

14. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state, federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Part 55, or their rules and regulations, or the State Implementation Plan.

15. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the violations specifically alleged herein; however, it does not resolve any criminal action that may result from these same violations.

16. This Consent Order addresses and resolves only those violations, actions, and omissions set forth specifically in the Violation Notices issued by EGLE dated August 18, 2017; January 31, 2018; October 5, 2018; October 12, 2018; November 21, 2018; and July 19, 2019. Nothing in this Consent Order resolves any of the claims, violations, actions, and omissions alleged by EGLE or the United States in *United States et al v. United States Steel Corporation*, No. 2:12cv034, U.S. District Court, Northern District Indiana.

17. Within thirty (30) days after the effective date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and mailed to the Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of \$79,227.00, which includes AQD costs for investigation and enforcement. To ensure proper credit, all payments made pursuant to this Consent Order shall include the "Payment Identification Number AQD40246" on the front of the check and/or in the cover letter with the payment. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

18. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.A of this Consent Order, the Company is subject to a stipulated fine of up to \$10,000.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 11.A.6 of this Consent Order, the Company is subject to

a stipulated fine of up to \$7,500.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 11.A.4, 11.B.9, or 11.D.3 of this Consent Order, the Company is subject to a stipulated fine of up to \$3,500.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 10.A, 10.B, 11.A.1, 11.A.5, 11.B.2, 11.B.3, 11.B.4, 11.B.5, 11.B.6, 11.C.4, 11.D.1, or 11.D.2 of this Consent Order, the Company is subject to a stipulated fine of up to \$2,500.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.B, 9.C, 9.D, 11.C.1, 11.C.2, or 11.C.3 of this Consent Order, the Company is subject to a stipulated fine of up to \$1,000.00 per violation per day. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 10.C, 10.D, 10.E, 10.F, 11.A.2, 11.A.3, 11.B.7, or 11.B.8 of this Consent Order, or paragraph 12 of this Consent Order if the Company is invoking the idling provision, the Company is subject to a stipulated fine of up to \$500.00 per violation per day. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of EGLE. Stipulated fines for failing to comply with paragraphs 9, 10, or 11 shall not accrue on any day or days or periods of time in which the No. 5 Pickle Line, B2 Blast Furnace, or D4 Blast Furnace, as applicable, are idled. Stipulated fines for failing to comply with paragraph 9 shall not accrue on any day or days or periods of time in which the No. 5 Pickle Line, B2 Blast Furnace, or D4 Blast Furnace, as applicable, are not operating. Stipulated fines for failing to comply with paragraphs 11.A.4, 11.A.6, 11.B.9, and 11.D.3 shall not accrue on any day or days or period of time in which the No. 5 Pickle Line, B2 Blast Furnace, or D4 Blast Furnace, as applicable, are not operating and the applicable requirements can only be performed when the equipment is operating. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days after written demand and shall be mailed to the Michigan Department of Environment, Great Lakes, and Energy, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the "Payment Identification Number AQD40246-S" on the front of the check and/or in the cover letter with the payment. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

19. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit or EGLE administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

20. To ensure timely payment of the settlement amount assessed in paragraph 17 and any stipulated fines assessed pursuant to paragraph 18 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest payment shall be determined at a rate of interest that is equal to one percent (1%) plus the average interest rate paid at auctions of 5-year United States treasury notes during the six months immediately preceding July 1 and January 1, as certified by the state treasurer, compounded annually, and using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the State of Michigan in accordance with paragraph 17 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

21. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 17. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 18 of this Consent Order but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by EGLE of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by EGLE pursuant to Section 5529 of Part 55, MCL 324.5529, and therefore are not reviewable under Section 5529 of Part 55.

22. This compliance program is not a variance subject to the twelve (12) month limitation specified in Section 5538 of Part 55, MCL 324.5538.

23. This Consent Order shall remain in full force and effect for a period of at least five (5) years. Thereafter, this Consent Order shall terminate only upon written notice of termination issued by the AQD Director. Prior to issuance of a written notice of termination, the Company

shall submit a request, to the AQD Director at the Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Detroit District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the Great Lakes Works Facility; and (iv) such information as may be requested by the AQD Director. Termination of this Consent Order shall be executed upon completion of the terms and conditions of this Consent Order and will not be unreasonably withheld.

24. In the event United States Steel Corporation sells or transfers the Great Lakes Works Facility, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Detroit District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the United States Steel Corporation must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Detroit District Supervisor within thirty (30) days after assuming the obligations of this Consent Order.

25. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, MCL 324.5511 and MCL 5528(3), the public was notified of a 60-day public comment period and was provided the opportunity for a public hearing.

26. Section 5530 of Part 55, MCL 324.5530, may serve as a source of authority but not a limitation under which this Consent Order may be enforced. Further, Part 17 of the NREPA, MCL 324.1701 *et seq.*, and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

27. Upon entry of this Consent Order, the Stipulation for Entry of Final Order by Consent, AQD No. 22-2016, with effective date of December 16, 2016, shall be null and void, and of no further force or effect.

28. The Company hereby stipulates that entry of this Consent Order is a result of an action by EGLE to resolve alleged violations of its Great Lakes Works Facility located at No. 1 Quality Drive, Ecorse, Wayne County, Michigan. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

**UNITED STATES STEEL CORPORATION**

DANIEL BROWN - GENERAL MANAGER  
Print Name and Title

[Signature] Date: 11/10/2020  
Signature

The above signatory subscribed and sworn to before me this 10 day of November, 2020.

KOTIE BENEDICT  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF WAYNE  
MY COMMISSION EXPIRES Aug 3, 2025  
ACTING IN COUNTY OF Wayne

[Signature]  
Notary Public Signature  
Kotie Benedict  
Notary Public Printed Name

My Commission Expires: Aug 3, 2025

DAVID W HACKER  
Print Name - Counsel for United States Steel Corporation

[Signature] Date: 11/04/2020  
Signature

Approved as to Content:

Approved as to Form:

[Signature]  
Mary Ann Dolehanty, Director  
AIR QUALITY DIVISION  
DEPARTMENT OF ENVIRONMENT,  
GREAT LAKES, AND ENERGY

[Signature]  
Neil Gordon, Section Head  
ENVIRONMENTAL REGULATION SECTION  
ENVIRONMENT, NATURAL RESOURCES,  
AND AGRICULTURE DIVISION  
DEPARTMENT OF ATTORNEY GENERAL

Dated: 11/19/2020

Dated: 11/18/2020

FINAL ORDER

The Director of the Air Quality Division having had opportunity to review this Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environment, Great Lakes, and Energy pursuant to the provisions of Part 55 of the NREPA and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that this Consent Order is approved and shall be entered in the record of EGLE as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

  
\_\_\_\_\_  
Mary Ann Dolehanty, Director  
Air Quality Division

Effective Date: 11/19/2020

## Submittal of Source Emission Test Plans and Reports

### INTRODUCTION

The source emission test is often the ultimate determination of compliance. The results of a test are of great significance to both the regulatory agency and the source. Since the results may determine the course of future enforcement discussions between the agency and the source, it is important that the test be performed in a valid and representative manner. The complex nature of the various sampling methods places great responsibility on both agency and testing personnel to assure each test is an accurate representation of a source's actual emissions.

The objective of this document is to describe the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD) technical submittal requirements for a source test. The format described applies to the requirements of the Michigan Air Pollution Control Rules R. 336.2001 *et seq.*, federal regulations (Part 60-New Source Performance Standards, Part 61- National Emission Standards for Hazardous Air Pollutants (NESHAP), Part 63-Maximum Achievable Control Technology) and to any other emission test submitted for reasons such as a permit requirement, for a consent order, consent judgment, or at the request of the AQD.

### TEST PLAN SUBMITTAL

In order to establish uniform requirements and help ensure proper test methods and procedures are employed, the information specified below should be submitted to the appropriate AQD District Office (DO) and the Technical Programs Unit (TPU) in Lansing, at least thirty (30) days prior to the scheduled test date. A complete submittal will minimize the possibility of a test rejection as a result of improper sampling or data collection methods. The proposed test date(s) must be included in the test plan to be considered complete.

Testing shall be performed in strict accordance with the procedures specified in Title 40 of the Code of Federal Regulations, Part 60 (Standards of Performance for New Stationary Sources, Appendix A, as amended), Part 61 (NESHAP, Appendix B), and Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans, Appendix M); and the EGLE Rules, Part 10, Intermittent Testing and Sampling. Any variations in the sampling or analytical procedures must be described in the test plan and receive approval from the AQD prior to testing. If state or federal test methods are not available for the pollutants of concern or the nature of the test site makes it impractical to use them, other methods may be proposed as necessary.

While the specific items in the test plan will vary depending on the source and pollutants of interest, the following format should be utilized:

1. Identification and a brief description of the source to be tested. The description should include:
  - a. Names, addresses, and contact information for the facility and consultant/personnel who will be performing the test. Expected test date(s);
  - b. Type of industrial process or combustion facility;
  - c. Type and quantity of raw and finished materials used in the process;
  - d. Description of any cyclical or batch operations, which would tend to produce variable emissions with time;
  - e. Basic operating parameters used to regulate the process; and

- f. Rated capacity of the process. Process capacity can be demonstrated by calculating an average and maximum production rate using facility records. Based on these figures the facility shall include a production rate to be maintained during emission testing.
2. A brief description of any air pollution control equipment associated with the process:
  - a. Type of control device;
  - b. Operating parameters;
  - c. Rated capacity and efficiency and
  - d. Any maintenance activity on the air pollution control equipment within the last three months.
3. Applicable Facility SRN, permit number and emission limits for the process to be tested.
4. Identify all pollutants to be measured.
5. Describe in detail the sampling and analysis procedures, including the applicable standard methods reference. Provide a description of the sampling train(s) to be used, including schematic diagrams if appropriate. Justify any proposed sampling or analytical modifications.
6. The number and length of sampling runs, which will constitute a complete test.
7. Dimensioned sketch showing all sampling ports in relation to breeching and to upstream and downstream disturbances or obstructions of gas flow.
8. Estimated flue gas conditions such as temperature, moisture, and velocity.
9. Projected process operating conditions during which the tests will be run (e.g., production rate). These conditions should match the operating conditions stated in the facility's permit or facility operations shall be at the maximum routine operating conditions during the test.
10. A description of any process or control equipment data to be collected during the test period. This should include any permit required information used to demonstrate the acceptable operations of emissions control processes and production rates.
11. A description of any monitoring data to be collected during the test period and subsequently reported (e.g., stationary continuous emission monitor data).
12. Field quality assurance/quality control (QA/QC) procedures (e.g., field blanks, sample storage, and transport methods) and chain of custody procedures.
13. Laboratory QA/QC procedures utilized as part of the testing (e.g., manner and frequency of blanks, spikes, and standards). This should include analysis of audit samples where required as a component of the approved test method.

If the source operates under a Renewable Operating Permit (ROP), certification by a responsible official, as defined in the Michigan Air Pollution Control Rule R 336.1118(j), using the Renewable Operating Permit Certification (ROPC) form (EQP 5736), must be included with the test plan and cover letter. This form shall certify that the testing will be conducted in

accordance with the attached test plan and that the facility will be operated in compliance with permit conditions or at the maximum routine operating conditions for the facility.

### EMISSION TEST REPORTING

The emission test report should contain all pertinent data concerning the test program. In addition to reporting the results, it should include descriptions of the source, the sampling and analytical methodologies, the process operating conditions, and all raw field data, laboratory analytical data, and calculation methods. Since the report will serve as evidence to both the agency and the source as a demonstration of the compliance status of the facility, it is important it be complete in content and adequate in quality. Its contents should be presented in an understandable and organized manner. The information listed below shall be submitted to the appropriate AQD District Office and the AQD Technical Programs Unit by the date specified in an applicable air use permit, consent order, consent judgment, or state or federal regulation. Otherwise, pursuant to Michigan Air Pollution Control Rules R 336.2001 *et seq.*, a complete test report shall be submitted to the AQD within sixty (60) days following the last date of testing. In the event that the test report is not complete, additional information will be requested for submittal. If the information is not received following two written requests to the facility, the test results may be rejected by the AQD.

While the exact format of the report and the applicable information necessary will vary depending on the source and the pollutants of interest, the following format should be utilized.

1. Introduction:
  - a. Identification, location, and dates of tests;
  - b. Purpose of testing;
  - c. Brief description of source; and
  - d. Names, addresses, and telephone numbers of the contacts for information regarding the test and the test report, and names and affiliation of all personnel involved in conducting the testing.
2. Summary of Results:
  - a. Operating data (e.g., production rate, fuel type, or composition);
  - b. Applicable Facility SRN, permit number, and Emission Unit ID or designation for the source; and
  - c. Results expressed in units consistent with the emission limitation applicable to the source, and comparison with emission regulations.
3. Source Description:
  - a. Description of process, including operation of emission control equipment;
  - b. Process flow sheet or diagram (if applicable);
  - c. Type and quantity of raw and finished materials processed during the tests;
  - d. Maximum and normal rated capacity of the process; and
  - e. A description of process instrumentation monitored during the test.
4. Sampling and Analytical Procedures:
  - a. Description of sampling train(s) and field procedures;
  - b. Description of recovery and analytical procedures;
  - c. Dimensioned sketch showing all sampling ports in relation to breeching and to upstream and downstream disturbances or obstructions of gas flow; and
  - d. A sketch of cross-sectional view of stack indicating traverse point locations and exact stack dimensions.

5. Test Results and Discussion:
  - a. Detailed tabulation of results including process operating conditions and flue gas conditions;
  - b. Discussion of significance of results relative to operating parameters and emission regulations;
  - c. Discussion of any variations from normal sampling procedures or operating conditions, which could have affected the results;
  - d. Documentation of any process or control equipment upset condition, which occurred during the testing;
  - e. Description of any major maintenance performed on the air pollution control device(s) during the three-month period prior to testing;
  - f. In the event of a re-test, a description of any changes made to the process or air pollution control device(s) since the last test;
  - g. Results of any quality assurance audit sample analyses required by the reference method;
  - h. Calibration sheets for the dry gas meter, orifice meter, pitot tube, and any other equipment or analytical procedures, which require calibration;
  - i. Sample calculations of all the formulas used to calculate the results;
  - j. Copies of all field data sheets, cyclonic flow checks, including any pre-testing, aborted tests, and/or repeat attempts; and
  - k. Copies of all laboratory data including QA/QC (e.g. blanks, spikes, standards).

If the source operates under an ROP, certification by a responsible official, as defined in the Michigan Air Pollution Control Rule 336.1118(j), using the ROPC form (EQP 5736), must be included with the emission test results and cover letter. This form shall certify that the testing was conducted in accordance with the approved test plan and that the facility operating conditions were in compliance with permit requirements or were at the maximum routine operating conditions for the facility.

#### REFERENCES

<sup>1</sup> Michigan Air Pollution Control Rules R 336.2001 *et seq.*,

<sup>2</sup> United States Environmental Protection Agency, Plant Inspection Workshop-Techniques for Evaluating Performance of Air Pollution Control Equipment: Observing Compliance Tests, February 1981.

#### Mailing Address for the Technical Programs Unit

Michigan Department of Environment, Great Lakes, and Energy  
Air Quality Division – Technical Programs Unit  
P.O. Box 30260  
Lansing, MI 48909-7760

#### Street Address for Technical Programs Unit (needed for Federal Express, UPS, etc.)

Michigan Department of Environment, Great Lakes, and Energy  
Air Quality Division – Technical Programs Unit  
Constitution Hall, 2<sup>nd</sup> Floor South Tower  
525 West Allegan Street  
Lansing, MI 48933-1502

**Supplemental Environmental Project Submittal**

No. 04-002

U. S. Steel – Great Lakes Works

River Rouge Blight – Veteran’s Memorial Ice Rink/Dan Briney Hall

**Name and Location of Entity Subject to the Enforcement Action**

U. S. Steel – Great Lakes Works  
1 Quality Drive  
Ecorse, Wayne County

U. S. Steel – Great Lakes Works  
Zug Island  
River Rouge, Wayne County

**Regulatory Information**

Summary of Alleged Violations that are part of the subject enforcement action

- Failed to operate No. 5 Pickle Line Scrubber at or above the required minimum recirculation and make-up water flow rates
- Exceeded the HCl Acid emission limit for the No. 5 Pickle Line Scrubber
- Exceeded the visible emissions limits for opacity from the B2 Blast Furnace Casthouse roof monitor, B2 Blast Furnace backdraft stack, D4 Blast Furnace slag pits, and D4 Blast Furnace backdraft stack.

Other Enforcement Actions

- Region V Consent Decree – Case No. 2:12-cv-304
- AQD 22-2016
- AQD 1-2016

**Project Name**

River Rouge Blight – Veteran’s Memorial Ice Rink/Dan Briney Hall

**Project Manager**

Alexis Piscitelli  
1 Quality Drive  
Ecorse, MI 48229  
313-749-3900 (o)  
313-749-2063 (f)  
apiscitelli@uss.com

**EGLE Contact Person**

N/A

**Geographic Area to Benefit from the Project**

The City of River Rouge, Wayne County

**SEP Categories**

Pollution Reduction  
Environmental Restoration and Protection  
Public Health

**Project Description**

Veteran's Memorial Ice Rink/Dan Briney Hall is located in a River Rouge neighborhood. The buildings have been abandoned and continue to deteriorate. The property is well beyond any hope of restoration. Currently the structure is a hazard, wind has caused material, including particulate matter, to blow off the building into the ambient air and the adjoining neighborhood. It is also an attractive nuisance for illegal and mischievous behavior.

The City of River Rouge contracted Air Quality Consultants (AQC) to identify any asbestos containing building materials (ACBM) on the inside and outside of the Ice Rink. The inspection was conducted on March 6, 2019 by Mr. Jeffrey Rostoni, AQC. As a result, it was found that the floor tile (not the mastic) contained asbestos. The tile was found to be in good condition and did not appear to be friable. It is also suspected that the flat roof portion of the building could have ACBM, and as such should be treated as asbestos containing during demolition. A copy of the full report from AQC is attached at the end.

The SEP would include:

- Site preparation including remediation prior to demolition including asbestos remediation and disposal with a secondary survey of the Site, including an asbestos evaluation of the roof and HVAC, refrigerant recovery and disposal, PCB remediation and disposal, mercury remediation and disposal. Temporary fencing around the site.
- Complete site demolition including proper recycling or disposal of debris down to the bare ground including the footings and building slab.
- Backfill and leveling of the site where the buildings were located. Grass seed will be planted on the bare dirt.



**Expected Environmental Benefits**

**Pollution Reduction, Environmental Restoration and Protection, and Public Health**

Site remediation of the Veteran’s Memorial Ice Rink/Dan Briney Hall, approximately 1.6 acres, is expected to reduce public exposure to potentially harmful substances by including the removal of:

- Asbestos
- PCBs (if found)
- Refrigerant Recovery
- Mercury Lighting

**Project Budget**

All costs are one-time expenditures to benefit the City of River Rouge and Wayne County.

U. S. Steel is a C Corporation.

**Site Preparation**

- Secondary asbestos survey to cover the roof and HVAC
- Install temporary fencing to contain area
- Disconnect utilities
- Site remediation and disposal prior to demolition \$40,000

**Site Restoration**

- Asbestos abatement and proper disposal
- Demolition of the buildings
- Clear and remove debris, concrete and dispose or recycle properly
- Backfill and level site \$260,000

**Total Estimated \$300,000**

### Project Schedule

| Project Step Description  | Milestone Date                                       |
|---|--|
| Complete Asbestos Survey  | March 6, 2019  |
| Complete second Asbestos Survey   | 45 days after USS receives notice of effective date  |
| Solicit and receive bids for site preparation, abatement, and restoration | 60 days after USS receives notice of effective date  |
| Select contractors and sign agreements                                    | 120 days after USS receives notice of effective date |
| Complete site preparation including remediation and disposal              | 210 days after USS receives notice of effective date |
| Complete demolition of site, clear and remove debris and concrete         | 330 days after USS receives notice of effective date |
| Backfill and level site   | 400 days after USS receives notice of effective date |
| Send EGLE Final Project Completion Report                                 | 460 day after USS receives notice of effective date  |

### Accounting

Invoices for completed work will be included in the final completion report. Any internal labor hours will be recorded and billed at the employee's hourly rate and included in the final completion report

### Reporting

Project Final Report will include:

- Detailed description of the SEP implemented including what contaminants were removed, how much and where they were disposed of.
- A description of any problems encountered in completing the SEP and solution implemented
- An itemized list of all SEP costs expended and documentation of all expenditures
- Evidence of SEP completion which may include photos, invoices, or correspondence.
- Description of work completed including a narrative description of activities and any milestone completion dates
- Any significant problems encountered or anticipated including implemented or proposed solutions

In addition, the asbestos survey will be submitted to the AQD for their review at least 2 weeks prior to the start of any additional work towards completion of the SEP.

### Prior Commitments and/or Regulatory Requirements

U. S. Steel is under no prior commitments and/or regulatory requirements to complete this project.

May 14, 2019

Sir/Madam

Re: U. S. Steel – Great Lakes Works  
EGLE Policy and Procedures  
Appendix B Supplemental Environmental Projects  
River Rouge Blight – Veteran’s Memorial Ice Rink/Dan Briney Hall

As we discussed, U. S. Steel is proposing to undertake a Supplemental Environmental Project as part of an enforcement negotiation. Veteran’s Memorial Ice Rink/Dan Briney Hall is located in a River Rouge neighborhood. The buildings have been abandoned and continue to deteriorate. The property is well beyond any hope of restoration. Currently the structure is a hazard, wind can cause material to blow off the building into the adjoining neighborhood. It is an attractive nuisance for illegal and mischievous behavior. The SEP would include:

- Site preparation including remediation prior to demolition including asbestos remediation and disposal, refrigerant recovery and disposal, PCB remediation and disposal, mercury remediation and disposal. Temporary fencing around the site
- Site demolition including proper recycling or disposal of debris
- Backfill and leveling of the site where the buildings were located

Pursuant to Appendix B Item 15 of MDEQ’s (EGLE’s) Supplemental Environmental Projects for Penalty Mitigation Policy (No. 04-002, Revised April 15, 2005), U. S. Steel is certifying that the proposed SEP is solely attributable to the settlement of the current enforcement action and that no funding has been budgeted to the project prior to the approval of the project, nor is the proposed project funded by grants, donations, low interest loans, or other sources of funding not attributable to the U. S. Steel’s normal budgetary process. U. S. Steel is also certifying that the proposed project is not being done, nor will U. S. Steel receive credit, as part of an environmental incentive or awards program offered by local, state, or federal government or industry.

We believe the project qualifies as a Supplemental Environmental Project and, upon approval, look forward to completing this beneficial project.

Sincerely,



Alexis Piscitelli  
Environmental Director  
U. S. Steel – Great Lakes Works, Midwest