

United States Steel Corporation
Midwest Consent Decree
September 14, 2018 Semi-Annual Report

This is the first semi-annual progress report that satisfies Section VIII Paragraph 18 of the Midwest Consent Decree (effective date March 1, 2018) which states the following:

“U. S. Steel shall submit a semi-annual progress report no later than March 15 and September 15 of each year, with the first semi-annual report due on the first March 15 or September 15 that occurs more than ninety (90) Days after the Effective Date. Each semi-annual report shall contain the following information with respect to, respectively, the half-year between July 1 and December 31, or the half-year between January 1 and June 30, commencing on the date of Entry of the Consent Decree:”

This semi-annual progress report covers the time period between January 1, 2018 and June 30, 2018.

- a) ***Identification of Work performed and progress made toward implementing the requirements of Section VI (Compliance Requirements), including a narrative description of activities undertaken, the status of any construction or compliance measures, and the completion of any milestones;***

Section VI, Paragraph 9.a-d items as well as Paragraph 12.a are complete. The Paragraph 12.b item will be included at the time the NPDES permit renewal application is submitted.

The Spill Notification Procedure was submitted to USEPA and IDEM with the Consent Decree. Currently the Spill Notification Procedure (Appendix B) is being revised.

As per Section VI, Paragraph 10, U. S. Steel developed and submitted an Operating & Maintenance manual and Preventative Maintenance Program Plan (O&M Plan) on April 13, 2018 to EPA and IDEM for review and approval (item a and c). EPA and IDEM partially disapproved the O&M plan in a letter dated May 30, 2018. Revisions to the O&M plan were made to address EPA and IDEM’s concerns. The revised O&M plan was submitted to EPA and IDEM for review and approval on June 26, 2018. As per Section VI, Paragraph 10.e, the results of the review and revisions are documented in a revision log contained within the O&M Plan. The revisions are summarized in section f of this semi-annual report.

As per Section VI, Paragraph 11.a, U. S. Steel conducted an evaluation of the existing wastewater process monitoring at the Midwest facility before March 30, 2018. U. S. Steel then developed a Design for Enhanced Waste Water Monitoring and submitted it to EPA and IDEM for review and approval on June 29, 2018 in accordance with Paragraph 11.b. A summary of the Enhanced Monitoring Assessment and status of each action is attached.

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- b) *Any significant problems encountered or anticipated in complying with the requirements of Section VI (Compliance Requirements), including implemented or proposed solutions;***

Inline hexavalent chromium monitoring trials are ongoing. There have been issues with quality of sample / sample preparation as well as detection levels of the different units. An Aqua Metrology Systems unit was trialed first and was unsuccessful. Currently a Chemscan unit is being trialed.

- c) *Identification and description of all non-compliance with any of the requirements under Section VI (Compliance Requirements), including description of the likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such noncompliance;***

There were no issues of non-compliance with any of the requirements under Section VI (Compliance Requirements) of the Consent Decree from the period of January 1, 2018 through June 30, 2018.

- d) *A statement of any exceedances of its NPDES Permit limitations;***

There were no NPDES Permit limitation exceedances at the Midwest Plant for the period of January 1, 2018 through June 30, 2018.

- e) *A summary of any spills and unpermitted Discharges occurring within the reporting period, and reported pursuant to the requirements included in Appendix B of this Decree, including the actual or estimated frequency, duration, and volume of each spill, unpermitted discharge or Permit limit exceedance; and***

There were no spills or unpermitted discharges that occurred at the Midwest facility between January 1, 2018 and June 30, 2018.

- f) *The results of any O&M Plan review, conducted pursuant to paragraph 10, completed within the reporting period.***

The initial O&M Plan was developed and submitted to EPA and IDEM for review and approval on April 13, 2018. EPA and IDEM partially disapproved the O&M plan in a letter dated May 30, 2018. Revisions to the O&M plan were made to address EPA and IDEM's concerns. The revised O&M plan was submitted to EPA and IDEM for review and approval on June 26, 2018. The O&M revision log is attached to this report and below is a summary of the revisions made relative to EPA and IDEM comments:

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Comment 1: The Manual lacks operational procedures to help avoid or minimize the impacts from spills and upset conditions at the Chrome Treatment Plant and the Final Treatment Plant. It is important for operators to have quick access to relevant SOPs to help avoid or minimize impacts of events such as the April 2017 spill. Standard operating procedures (SOPs), or at least references to the relevant SOPs, for such events shall be included in the Manual.

- References to Standard Operating Procedures are included in the Manual in Section IIB, IIC, IID, and IIE in Paragraph #4.
- Additional Procedures are being developed for each water treatment area to serve as a troubleshooting guide to address proper operation and upset conditions.
- References to these additional procedures were added to the Operating Procedure table under Paragraph #4 of each corresponding Section.
- The additional procedures include:
 - Oil Separation Process Control Practices – NSCS-M-P-7093-02-46 - page 6
 - Chrome Treatment Process Control Practices – NSCS-M-P-7093-02-48 - page 8
 - Final Treatment Process Control Practices – NSCS-M-P-7093-02-47 - page 11
 - Sludge Dewatering Process Control Practices – NSCS-M-P-7093-02-49 - Page 12

Comment 2: In Section III (Laboratory Requirements), U. S. Steel shall include a reference list of all SOPs for laboratory and field instruments (e.g., pH probes) related to NPDES permit compliance monitoring.

- Language was added to Section III (Laboratory Requirements) on pages 16 and 17 to address proper operation and maintenance of laboratory equipment related to NPDES compliance monitoring.
- U. S. Steel is responsible for proper operation and maintenance of five flow meters that are used for NPDES compliance monitoring:
 - Greenbelt II flow meter
 - Chrome Train A influent flow meter
 - Chrome Train B influent flow meter
 - Chrome sump flow meter
 - Final Treatment Effluent flow meter
- The flow meters were installed per manufacturers guidelines and only require annual calibration. A calibration frequency table was added on page 17.
- A Third-party EPA certified lab is responsible for all other equipment used for NPDES compliance monitoring. It is their responsibility to properly operate and maintain the equipment. U. S. Steel does not have any SOPs related to the

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equipment used for sampling and analysis conducted mostly offsite by the third-party EPA certified lab.

Comment 3: In Section IV (Recordkeeping Requirements), and Section VI (Preventive Maintenance Program Plan), U. S. Steel shall include a description of how O&M and preventive maintenance activities such as equipment calibration, repairs, replacements, alterations, maintenance tasks, and vulnerability assessments will be assigned and recorded. For example, does U. S. Steel intend to implement an electronic O&M/PMP system that will automatically assign tasks and record completed activities and repairs? If so, please describe the system and set forth a date certain schedule for implementation if not already on line.

- Language was added in Sections IV (Recordkeeping Requirements) and VI (Preventative Maintenance Program Plan), pages 17 and 18 describing how U. S. Steel is managing and documenting the O&M and preventative maintenance activities. Work Management and Documentation is administered through an electronic maintenance management system.

Comment 4: In Section V (Plan for Inspecting, Cleaning and Maintenance of Outfall Channels), U. S. Steel shall include a description of how inspection, cleaning, and maintenance activities will be recorded.

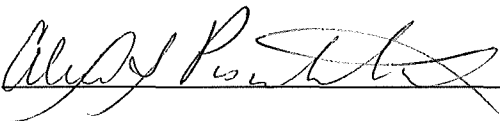
- Language was added in Section V (Plan for inspecting, cleaning and maintenance of Outfall channels), page 17, describing how U. S. Steel plans to inspect, clean and maintain the outfall channels. These activities will be documented in an electronic maintenance management system.

Comment 5: In Section VII (Review of O&M Plan and Preventative Maintenance Program Plan), U. S. Steel shall include operations and preventive maintenance of any wastewater process monitoring system components installed to date. After installation of the Wastewater Process Monitoring System, required pursuant to Paragraph 11 of the Consent Decree, U. S. Steel shall incorporate visual inspection and maintenance of the approved wastewater process monitoring equipment into the next annual review and update of the Manual.

- Language was added in Section VII (Review of O&M Plan and Preventative Maintenance Program Plan), page 18, to address adding additional equipment included in the Enhanced Monitoring Plan within five months of the plan's approval. All equipment that is currently installed, as of the date of this letter, is already included in the O&M and Preventative Maintenance Program Plan.

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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. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

Signature:  _____

Name: Alexis S. Piscitelli

Title: Director, Environmental, Great Lakes and Midwest

Date: September 14, 2018

