EXHIBIT 2 TO U.S. RESPONSE TO COMMENTS

Declaration of Brad Gavin

I, Brad Gavin, hereby declare and say:

1. The statements in this declaration are primarily based upon my 15 years of experience working at the Indiana Department of Environmental Management (IDEM); on knowledge I have gained as an environmental professional drafting and reviewing numerous National Pollutant Discharge Elimination System (NPDES) permits, on knowledge I have gained from reviewing files and documents relating to a facility's compliance with the Clean Water Act (CWA) and the facility's NPDES permit and on knowledge I have gained from my review of documents and involvement with on-going CWA compliance matters relating to U.S. Steel's Midwest Plant in Portage, Indiana (Midwest Plant).

2. I received a Bachelor of Science in Chemical Engineering from Purdue University in West Lafayette, Indiana in 1983, and a Master of Studies in Environmental Law and a Juris Doctor from Vermont Law School in 1995.

3. I originally joined the IDEM's predecessor agency in 1983. From 1983 to 1990, I worked as an engineer in the NPDES permits section which included the drafting of industrial NPDES permits; from 1990 to 1992, I worked as an engineer in the Office of Solid and Hazard Waste, which included engineering review of design plans for solid waste facilities, such as landfills and processing facilities; from 1995 to 1996, I worked as an attorney in the Office of Legal Counsel, which included work on rulemaking involving water quality standards and NPDES permits and water and solid waste enforcement actions; from 1996 to 1999, I worked in the Office of Water, which included drafting rules, providing guidance on NPDES permit implementation, and special projects; from 1999 to 2000, I worked in the Office of Enforcement which included work on water enforcement cases. From 2005 to 2016, I served as an attorney to the Indiana Department of Homeland Security and its predecessor agencies. I rejoined IDEM in 2017, where I am currently working as an engineer in the Permitting Branch of the Office of Water. Among other things, I provide technical support to the Industrial NPDES Permits Section.

4. In the course of my duties at IDEM, I have become very familiar with Indiana and federal statutes and rules governing NPDES permits.

5. The wastewater discharges at the Midwest Plant are governed by NPDES Permit IN0000337. The current NPDES permit governing these discharges was issued on March 30, 2016, with an effective date of April 1, 2016 and an expiration date of March 31, 2021. This permit contains limitations and monitoring requirements for various parameters at a number of different outfalls, including limitations in Part I.A.5. of the Midwest Plant's 2016 NPDES Permit at Outfall 304 for total chromium of 10.0 pounds per day (lbs/day) as a monthly average and 30.0 lbs/day as a daily maximum, and for hexavalent chromium of 0.17 lbs/day as a monthly average and 0.51 lbs/day as a daily maximum.

6. The Midwest Plant operates two wastewater treatment systems for process wastewater, a Chrome Treatment Plant and the North Final Treatment Plant. Chromium-bearing wastewaters and intermittent basement sump flow from the tin production areas are treated by the Chrome Treatment Plant which reduces hexavalent chromium to trivalent chromium and then removes trivalent chromium from the wastewater. This effluent is discharged through Outfall 204 and ultimately discharges through Outfall 004 into Burns Waterway. The average flow at this outfall for the period from January 2016 through December 2018 is 0.23 million gallons per day (MGD). Process wastestreams which do not contain chromium and some backwash and non-cooling water are sent to the North Final Treatment Plant (certain oily wastestreams are pretreated to remove oils prior to discharge to the North Final Treatment Plant). The treatment provided by the North Final Treatment Plant includes pH adjustment, solids removal and removal of any remaining oil. This effluent is discharged through Outfall 104 and ultimately discharges through Outfall 004 into Burns Waterway. The average flow at this outfall for the period from January 2016 through December 2018 is 9.3 MGD. Outfall 304 is an administrative outfall created to apply technology-based effluent limits to the discharges from Outfalls 104 and 204. The Midwest Plant also discharges non-contact cooling water and storm water through other outfalls to Burns Waterway.

7. On the morning of April 11, 2017, U. S. Steel discovered and reported a discoloration in the discharge from the Midwest Plant. Subsequent investigations revealed that an expansion joint in a pipe carrying chromium containing wastewater to the Chrome Treatment Plant had broken and the chromium had entered the North Final Treat Plant and was subsequently discharged to Burns Waterway.

8. IDEM conducted a joint inspection of the Midwest Plant with a representative from U.S. EPA on April 20, 2017. During that inspection and in its inspection report of June 2, 2017 (enclosed as Attachment 1), IDEM noted, in addition to concerns regarding the April 11, 2017 spill, NPDES permit violations including violations of discharge limitations, unsatisfactory operation and maintenance (O&M) at the Midwest Plant and unsatisfactory spill notification.

9. In the Monthly Monitoring Report (MMR) submitted by U. S. Steel to IDEM for April 2017, U. S. Steel reported a discharge of approximately 350 lbs. of total chromium and approximately 904 lbs. of hexavalent chromium, during the period April 10-12, 2017. The MMRs also revealed that U. S. Steel exceeded both the total chromium and hexavalent chromium monthly average effluent limits at Outfall 304 for April 2017 and the hexavalent chromium daily maximum effluent limits at Outfall 304 on April 11-12, 2017, and exceeded total chromium daily maximum effluent limits at Outfall 304 on April 10-11, 2017. These exceedances are in violation of Part I.A.5. of the Midwest Plant's 2016 NPDES Permit.

10. During the course of the negotiations between the federal and state agencies and U.S. Steel and prior to lodging of the proposed Decree, U.S. Steel took various steps to address the alleged pollution violations. Those steps, including repairs and improvements to critical wastewater containment infrastructure, are identified in Paragraph 9(a) of the proposed Decree. Further, while the proposed Decree was lodged with the Court, U. S. Steel began complying with the injunctive measures outlined in Section V of the proposed Decree, despite the fact that the Decree was not yet entered as a final judgment of the Court. These actions included submission of a number of key plans addressing operations and maintenance and wastewater monitoring, as described below.

11. In addition to requiring a number of repairs and improvements, the proposed Consent Decree requires U. S. Steel to conduct additional sampling, monitoring and preventive maintenance, to help prevent future discharge violations, including chromium spills. In that regard, the proposed Consent Decree requires U. S. Steel to develop O&M and preventive maintenance plans and to design and implement new wastewater process monitoring – all to further the goal of preventing future spills and exceedances of U.S. Steel's permit.

12. There are three main plans required by the proposed Consent Decree. First, the comprehensive Wastewater Operation & Maintenance Plan (O&M Plan) is designed to ensure that the company will at all times properly operate and

maintain all wastewater treatment process equipment used to treat wastewater at the Midwest Plant and provide personnel to carry out the operation, maintenance, repair, and testing functions required by the NPDES Permit. Second, the Preventive Maintenance Program Plan (PM Plan) is designed to help prevent breakdowns, reduce wear, improve efficiency and extend the life of the Midwest Plant's wastewater infrastructure. Third, the design for wastewater process monitoring (Wastewater Process Monitoring Design) will put into place an enhanced wastewater process monitoring system designed to avoid another occurrence such as the April 11, 2017 spill. Further, U.S. Steel has submitted over 40 standard operating procedures (SOPs) which are referenced in U. S. Steel's O&M and PM Plans.

13. Though EPA and IDEM initially disapproved U. S. Steel's O&M and PM Plans, on December 28, 2018, following U. S. Steel's improvements to and resubmission of the plans, EPA and IDEM approved the O&M/PM Plans. Also, on December 28, 2018, EPA and IDEM approved U. S. Steel's Wastewater Process Monitoring Design. Under the proposed Decree, U. S. Steel agrees to implement all of these approved plans on a fixed timeframe, including installation of the approved monitoring technologies and equipment and operation of the approved wastewater process monitoring. In addition, as part of the monitoring aspect of the plans and as required to achieve and maintain compliance with the conditions of the proposed Decree, U. S. Steel has increased the sampling frequency to daily for total and hexavalent chromium at Outfalls 104 and 204 and has been reporting the results to IDEM.

14. In my opinion, U.S. Steel's proper implementation of the approved O&M/PM Plans, the SOPs and the approved Wastewater Process Monitoring Design, coupled with the other compliance measures and enforcement mechanisms of the proposed Decree, will go a long way towards meeting the proposed Decree's objective of promoting U. S. Steel's compliance with the Clean Water Act and related requirements.

15. Both the O&M/PM Plans (which U. S. Steel must review every year to determine if modifications are necessary) and the Wastewater Process Monitoring Design are incorporated as Consent Decree requirements. Also, the Consent Decree requires U.S. Steel to include in its application for renewal of its NPDES Permit a request that the renewed Permit contain the requirements from the Consent Decree to develop, implement, and review the O&M Plan. In that

manner, the settlement ensures that, post Decree termination, some of the core compliance measures of the proposed Decree may well live on -- and remain enforceable -- in the Midwest Plant's NPDES Permit, thus helping to promote U. S. Steel's compliance with the Clean Water Act and related requirements long after termination of the Decree.

I hereby declare under penalty of perjury that the foregoing is true and correct.

Dated this 6th day of June, 2019.

Brad Gavin
Environmental Engineer

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.

100 N. Senate Avenue ● Indianapolis, IN 46204
(800) 451-6027 ● (317) 232-8603 ● www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno Pigott
Commissioner

June 02, 2017

Via Email to: jehanning@uss.com
Mr. Joe Hanning, Manager of Environmental Control
U.S. Steel Corporation, Midwest Plant
One North Broadway, MS 70-A
Gary, Indiana 46402

Dear Mr. Hanning:

Re: **Inspection Summary/ Enforcement Referral**
US Steel Midwest
NPDES Permit No. IN0000337
Portage, Porter County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Northwest Regional Office, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection:	April 20, 2017
Type of Inspection:	Reconnaissance Inspection
Inspection Results:	Violations were observed and will be referred to the Enforcement Section.

The following concerns were noted:

1. Part I. B. of the permit prohibits the discharge from any point sources specified within the permit from causing receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, or scum: (1) that will settle to form putrescent or otherwise objectionable deposits; (2) that are in amounts sufficient to be unsightly or deleterious; (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create nuisance; (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans; (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses. Effluent Appearance was rated as unsatisfactory due to a bluish-green color from the hexavalent chromium release on April 11, 2017 (Photo Attached) as observed by David Greinke - IDEM - Emergency Response. On April 20, 2017, the outfalls observed appeared clear and odorless.

2. Permit was rated as unsatisfactory. 327 IAC 5-2-2 states, in part, that any discharge of pollutants into waters of the state as a point source discharge is prohibited unless in conformity with a valid NPDES permit obtained prior to the discharge. IC 13-30-2-1 states, in part, that a person may not discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste, including any noxious odor, either alone or in combination with contaminants from other sources into the environment in any form that causes or would cause pollution that violates or would violate rules, standards, or discharge or emission requirements adopted by the board under the environmental management laws; or increase the quantity or strength of a discharge of contaminants into the waters or construct or install a sewer or sewage treatment facility or a new outlet for contaminants into the waters of Indiana without prior approval of the department. While U.S. Steel - Midwest holds a valid NPDES permit for discharges into Burns Waterway, the permit requires the chrome waste to be treated in the chrome treatment facility. The waste stream route created by the equipment failure was not a permitted activity.

3. Operation and Maintenance were rated as unsatisfactory. Part II. B. 1. of the permit requires that all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of the permit in accordance with 327 IAC 5-2-8(8) must be maintained in good working order and efficiently operated at all times.

   On April 11th, 2017, US Steel personnel detected discoloration in the process wastewater treatment system, which discharges to the Burns Waterway via Outfall 004. Upon further inspection of the cause, it was determined by US Steel personnel that the line that carried chrome waste to the chrome waste treatment facility had failed, possibly due to the corrosive material. The waste followed a trench, which altered the waste flow to the process waste facility, which was not designed to treat chrome. US Steel alerted the National Response Center once it realized it was likely excessive chromium levels were discharging out of Outfall 004 into Burns Waterway. Photos (See Attached) taken by David Greinke - IDEM - Emergency Response on April 11, 2017 indicate a bluish-green tint to the water exiting Outfall 004.

   The EPA began emergency response procedures at that time. The facility ceased production on April 11, 2017. Nearby beaches and the Indiana American Ogden Dunes drinking water intake were closed as a preventative measure. It was estimated by US Steel that approximately 350 pounds of total chromium and 300 pounds of hexavalent chromium were released in the first two days after the incident.

   The facility re-started operations in stages beginning on April 14, 2017. On April 17, 2017, the nearby beaches began opening and on April 18, 2017, the Indiana American water intake opened as the results of follow-up testing for total and hexavalent chromium were below the limit of detection for several consecutive days.

An inspection of the maintenance activities indicated that, while maintenance is being conducted, a proactive scheduling of maintenance activities and reports regarding maintenance activities are not consistently occurring.

4. Flow Measurement was rated as marginal due to potential minor obstructions in the channels for Outfalls 001 and 002. These channels should be inspected and corrected if needed.

5. Effluent Limits Compliance was rated as unsatisfactory. A review of the results of laboratory analysis for sampling conducted in response to the April release indicated the facility had, as of the time of the inspection, two hexavalent chromium and two total chromium daily maximum limit exceedences for April 2017. A later review of the DMR and MMR for April 2017 was conducted. Additional exceedences of one monthly average hexavalent chromium and one monthly average total chromium also occurred and were reported.

6. Other: Spill Notification was rated as unsatisfactory. 327 IAC 2-6.1-7(5) states, in part, that any person who operates, controls, or maintains any mode of transportation or facility from which a spill occurs shall, upon discovery of a reportable spill to the soil or surface waters of the state, exercise due diligence and document attempts to notify the nearest affected downstream water user located within ten (10) miles of the spill and in the state of Indiana for spills to surface water that cause damage. It was found that an initial spill notification was made by US Steel personnel to IDEM and other agencies, however, downstream users were notified by David Greinke with IDEM - Emergency Response, rather than US Steel personnel.

This matter is being referred to the OWQ Enforcement Section for appropriate action. If formal action is initiated, you will be issued a Notice of Violation informing you of how to proceed in resolving this matter. Please direct any questions to Nicholas Ream at 219-730-1691 or by email to nream@idem.IN.gov. A copy of the NPDES Industrial Facility Inspection Report is enclosed for your records.

Sincerely,

Rick Massoels, Deputy Director
Northwest Regional Office

Enclosure

NPDES Industrial Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NPDES Permit Number:	Facility Type:		Facility Classification:	TEMPO AI ID
IN0000337	Industrial	Major	D	14435

Date(s) of Inspection: April 20, 2017

Type of Inspection: Reconnaissance Inspection

Name and Location of Facility Inspected:			Receiving Waters/POTW:	Permit Expiration Date:
US Steel Midwest 6300 US Highway 12 Portage	IN 46368	County: Porter	Portage Burns Waterway to Lake Michigan	3/31/2021 Design Flow: NA

On Site Representative(s):

First Name	Last Name	Title	Email	Phone
Mark	Henry	Environmental Coordinator	mhenry@uss.com	219-763-5869
Brandon	Miller	Environmental Coordinator	bsmiller@uss.com	219-888-3369
Joe	Hanning	Manager of Environmental Control	jehanning@uss.com	

Was a verbal summary of the inspection given to the on-site rep? **Yes**

Certified Operator:	Number:	Class:	Effective Date:	Expiration Date:	Email:
Mark Henry	20376	D	7-1-16	6-30-18	mhenry@uss.com

Responsible Official:	Permittee: U.S. Steel Corporation, Midwest Plant	
Mr. Joe Hanning, Manager of Environmental Control One North Broadway, MS 70-A	Email: jehanning@uss.com	
	Phone:	Contacted?
Gary, Indiana 46402	Fax:	Yes

INSPECTION FINDINGS

- ○ Conditions evaluated were found to be satisfactory at the time of the inspection. (5)
- ○ Violations were discovered but corrected during the inspection. (4)
- ○ Potential problems were discovered or observed. (3)
- ○ Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)
- ◉ Violations were discovered and may subject you to an appropriate enforcement response. (1)

AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated

S	Receiving Waters	S	Facility/Site	N	Self-Monitoring	N	Compliance Schedules
U	Effluent/Discharge	U	Operation	M	Flow Measurement		
U	Permit	U	Maintenance	N	Laboratory	U	Effluent Limits Compliance
		N	Sludge	N	Records/Reports	U	Other: Spill Notification

DETAILED AREA EVALUATIONS

Receiving Waters:

Comments:

The receiving stream was free of notable foam, algae or solids on the day of the inspection.

Effluent/Discharge:

Evaluation of Multiple Outfalls:

Outfall #	Insp. Date	Outfall Inspection Comments
002	4/20/2017	The effluent appeared clear and colorless on 4/20/17.
003	4/20/2017	The effluent appeared clear and colorless on 4/20/17.
004	4/20/2017	The effluent appeared clear and colorless on 4/20/17.

104	4/20/2017	The effluent appeared clear and colorless on 4/20/17.

Comments:
Part I. B. of the permit prohibits the discharge from any point sources specified within the permit from causing receiving waters, including the mixing zone, to contain substances, materials, floating debris, oil, or scum: (1) that will settle to form putrescent or otherwise objectionable deposits; (2) that are in amounts sufficient to be unsightly or deleterious; (3) that produce color, visible oil sheen, odor, or other conditions in such degree as to create nuisance; (4) which are in amounts sufficient to be acutely toxic to, or to otherwise severely injure or kill aquatic life, other animals, plants, or humans; (5) which are in concentrations or combinations that will cause or contribute to the growth of aquatic plants or algae to such a degree as to create a nuisance, be unsightly, or otherwise impair the designated uses. Effluent Appearance was rated as unsatisfactory due to a bluish-green color from the hexavalent chromium release on April 11, 2017 (Photo Attached) as observed by David Greinke - IDEM - Emergency Response. On April 20, 2017, the outfalls observed appeared clear and odorless.

Permit:
Comments:
Permit was rated as unsatisfactory. 327 IAC 5-2-2 states, in part, that any discharge of pollutants into waters of the state as a point source discharge is prohibited unless in conformity with a valid NPDES permit obtained prior to the discharge. IC 13-30-2-1 states, in part, that a person may not discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste, including any noxious odor, either alone or in combination with contaminants from other sources into the environment in any form that causes or would cause pollution that violates or would violate rules, standards, or discharge or emission requirements adopted by the board under the environmental management laws; or increase the quantity or strength of a discharge of contaminants into the waters or construct or install a sewer or sewage treatment facility or a new outlet for contaminants into the waters of Indiana without prior approval of the department. While U.S. Steel - Midwest holds a valid NPDES permit for discharges into Burns Waterway, the permit requires the chrome waste to be treated in the chrome treatment facility. The waste stream route created by the equipment failure was not a permitted activity.

Facility/Site:
Comments:
The facility grounds were well maintained.

Operation:
Comments:
Operation was rated as unsatisfactory. Please refer to Maintenance

Maintenance:
Comments:
Part II. B. 1. of the permit requires that all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of the permit in accordance with 327 IAC 5-2-8(8) must be maintained in good working order and efficiently operated at all times.

On April 11th, 2017, US Steel personnel detected discoloration in the process wastewater treatment system, which discharges to the Burns Waterway via Outfall 004. Upon further inspection of the cause, it was determined by US Steel personnel that the line that carried chrome waste to the chrome waste treatment facility had failed, possibly due to the corrosive material. The waste followed a trench, which altered the waste flow to the process waste facility, which was not designed to treat chrome. US Steel alerted the National Response Center once it realized it was likely excessive chromium levels were discharging out of Outfall 004 into Burns Waterway. Photos (See Attached) taken by David Greinke - IDEM - Emergency Response on April 11, 2017 indicate a bluish-green tint to the water exiting Outfall 004.

The EPA began emergency response procedures at that time. The facility ceased production on April 11, 2017. Nearby beaches and the Indiana American Ogden Dunes drinking water intake were closed as a preventative measure. It was estimated by US Steel that approximately 350 pounds of total chromium and 300 pounds of hexavalent chromium were released in the first two days after the incident.

The facility re-started operations in stages beginning on April 14, 2017. On April 17, 2017, the nearby beaches began opening and on April 18, 2017, the Indiana American water intake opened as the results of follow-up testing for total and hexavalent chromium were below the limit of detection for several consecutive days.

An inspection of the maintenance activities indicated that, while maintenance is being conducted, a proactive scheduling of maintenance activities and reports regarding maintenance activities are not consistently occurring.

Flow Measurement:
Comments:

Flow Measurement was rated as marginal due to potential minor obstructions in the channels for Outfalls 001 and 002. These channels should be inspected and corrected if needed.

Effluent Limits Compliance:

No 1. Were DMRs reviewed as part of the inspection?

Comments:

Effluent Limits Compliance was rated as unsatisfactory. A review of the results of laboratory analysis for sampling conducted in response to the April release indicated the facility had, as of the time of the inspection, two hexavalent chromium and two total chromium daily maximum limit exceedences for April 2017. A later review of the DMR and MMR for April 2017 was conducted. Additional exceedences of one monthly average hexavalent chromium and one monthly average total chromium also occurred and were reported.

Other:

Spill Notification

Comments:

Other: Spill Notification was rated as unsatisfactory. 327 IAC 2-6.1-7(5) states, in part, that any person who operates, controls, or maintains any mode of transportation or facility from which a spill occurs shall, upon discovery of a reportable spill to the soil or surface waters of the state, exercise due diligence and document attempts to notify the nearest affected downstream water user located within ten (10) miles of the spill and in the state of Indiana for spills to surface water that cause damage. It was found that an initial spill notification was made by US Steel personnel to IDEM and other agencies, however, downstream users were notified by David Greinke with IDEM - Emergency Response, rather than US Steel personnel.

IDEM REPRESENTATIVE

Inspector Name:	Email:	Phone Number:
Nicholas Ream	nream@idem.IN.gov	219-730-1691

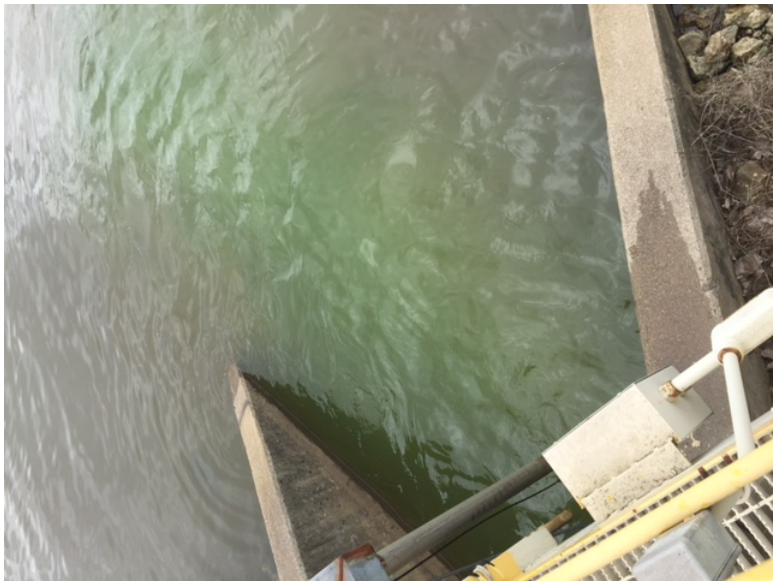
Other staff participating in the inspection:

Name(s)	Phone Number(s)
Dean Maraldo - U.S. EPA	(312) 353-2098
Cathy Csatari - IDEM - RCRA	219-464-0233

IDEM MANAGER REVIEW

IDEM Manager:	Date:
Rick Massoels	5/4/2017

Inspection Photographs



Facility:
US Steel Midwest

Photographer:
David Greinke

Date: 04/11/2017 Time:

Others Present:

Location/Description:
Down and west view of Outfall 004 as taken by David Greinke, IDEM-Emergency Response, on 4/11/17.

Facility:
US Steel Midwest

Photographer:
David Greinke

Date: 04/11/2017 Time:

Others Present:

Location/Description:
Down and southwest view of Outfall 004 as taken by David Greinke, IDEM - Emergency Response, on 4/11/17.