



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 30 2009

REPLY TO THE ATTENTION OF:

AE-17J

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

David Rintoul, General Manager  
United States Steel Corporation – Great Lakes Works  
No. 1 Quality Drive  
Ecorse, Michigan 48229

Dear Mr. Rintoul:

The U. S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to United States Steel Corporation – Great Lakes Works (U.S. Steel – Great Lakes Works). This NOV/FOV is issued in accordance with Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a).

EPA performed an inspection from August 25-26, 2008, and subsequently issued requests for information to U.S. Steel. Based on the August 2008 inspection and U.S. Steel's responses to the information requests, EPA finds that U.S. Steel failed to: (1) properly control air emissions from its blast furnace casthouses, basic oxygen furnace shops, slag pits, and slag loading trucks; (2) consistently meet operational standards required by its Operation and Maintenance Plan and Title V Permit; and (3) keep records in accordance with the CAA and its implementing regulations.

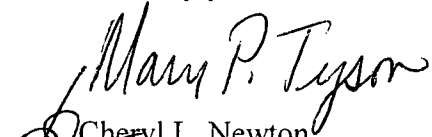
EPA has determined that U.S. Steel has violated the National Emission Standards for Hazardous Air Pollutants, the Michigan State Implementation Plan, and Operating Permit requirements under Title V of the Act, 42 U.S.C. §§ 7661 – 7661e, at its facility in Ecorse, Michigan.

EPA is offering you an opportunity to confer with us about the violations cited in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violations, and the steps you will take to bring the facilities into compliance. Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contacts in this matter are Brian Dickens, Ethan Chatfield, Monica Onyzsko, and Gina Harrison. You may call Ms. Harrison at (312) 353-6956 to request a

conference. You should make your request for a conference no later than 10 calendar days after you receive this letter, and we should hold any conference within 30 calendar days of your receipt of this letter. EPA hopes this NOV/FOV will encourage U.S. Steel to comply with the requirements of the CAA.

Sincerely yours,

  
Cheryl L. Newton  
Director  
Air and Radiation Division

Enclosure

cc: David W. Hacker, U.S. Steel Law Department  
Bernard Sia, Michigan Department of Environmental Quality

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**IN THE MATTER OF:**

**U.S. Steel Corporation – Great Lakes  
Works, Ecorse, Michigan.**

**NOTICE OF VIOLATION and  
FINDING OF VIOLATION**

**EPA-5-09-MI-16**

**Proceedings Pursuant to  
the Clean Air Act,  
42 U.S.C. §§ 7401 et seq.**

**NOTICE AND FINDING OF VIOLATION**

U.S. Steel Corporation – Great Lakes Works (you or U.S. Steel) owns and operates an integrated iron and steel facility located at No. 1 Quality Drive, Ecorse, Michigan (facility). U.S. Steel owns and operates blast furnaces, basic oxygen process (BOP) furnaces, coke ovens, steel pickling lines, and other operations at the facility.

EPA is sending this Notice of Violation and Finding of Violation (NOV/FOV) to notify you that we have found that U.S. Steel has violated the following provisions related to the Clean Air Act (the Act or CAA): the Michigan State Implementation Plan (SIP); the Michigan Title V Permit Program; and the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**Statutory and Regulatory Authority**

**Michigan SIP Requirements**

1. The CAA requires the promulgation of Primary and Secondary National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. To attain and maintain these standards, each state is required to develop a state implementation plan. The Michigan SIP includes the following requirements:
  - a) Pursuant to R 336.1364, visible emissions from Basic Oxygen Process (BOP) operations are limited to twenty percent (20%) opacity on a three-minute average.
  - b) Pursuant to R 336.1364(2), visible emissions from the Basic Oxygen Process (BOP) roof monitor are limited to twenty percent (20%) opacity on a three-minute average.

- c) Pursuant to R 324.5524(2), visible emissions from storage piles are limited to five percent (5%) opacity on a six-minute average.
- d) Pursuant to R 336.1201(3), visible emissions from slag skimming exiting the BOP Shop roof monitor are limited to ten percent (10%) opacity on a three-minute average.

#### **Federal CAA Requirements**

- 2. On March 16, 1994, EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 C.F.R. Part 63, *et seq.* The provisions at 63.6(e) regulate compliance with standards and maintenance requirements and require the owner or operator of an affected source to operate all associated air pollution control equipment and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions.
- 3. Section 112(b) of the CAA established a list of hazardous air pollutants (HAPs) and provided that EPA shall add to the list additional pollutants that may present a threat of adverse human health effects through inhalation or other routes of exposure. Section 112(d) provides that EPA shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of listed HAPs.
- 4. On May 20, 2003, EPA promulgated the NESHAP for Integrated Iron and Steel Manufacturing, 40 C.F.R. Part 63, Subpart FFFFF. The purpose of these standards is to reduce, on a national scale, emission of chemicals that possess carcinogenic or toxic characteristics. These regulations include the following requirements:
  - a) Pursuant to 40 C.F.R. Part 63, Subpart FFFFF, visible emissions from blast furnaces casthouses are limited to twenty percent (20%) opacity on a six-minute average.
  - b) Pursuant to 40 C.F.R. Part 63, Subpart FFFFF, visible emissions at BOP roof monitors are limited to twenty percent (20%) opacity on a three-minute average.
  - c) Pursuant to 40 C.F.R. Part 63, Subpart FFFFF, a source must develop an Operation and Maintenance Plan for each control system or control device. This plan must set a limit for critical equipment parameters, such as collection system damper position.

#### **Michigan Title V Requirements**

- 5. The CAA requires states to develop a major source permit program, known as the Title V permit program. EPA approved Michigan's permit program on December 4, 2001, at 66 *Fed. Reg.* 62949. Violations of a Title V permit are federally enforceable.

U.S. Steel's Title V Permit 199600132d was issued March 1, 2005, and includes the following requirements:

- a) Pursuant to Condition B-1.II.B, visible emissions from storage piles are limited to five percent (5%) opacity on a six-minute average.
  - b) Pursuant to Condition E-01.12-14.II.B, visible emissions from blast furnaces A, B, and D baghouse stack are limited to ten percent (10%) opacity on a six-minute average.
  - c) Pursuant to Condition E-01.12-14.II.B, visible emissions from blast furnaces A, B, and D casthouse roof monitors are limited to twenty percent (20%) opacity on a six-minute average.
  - d) Pursuant to Condition E-01.12-14.V.1, U.S. Steel must not operate any blast furnace unless the baghouse control system is installed, maintained, and operated in a satisfactory manner. U.S. Steel must operate the blast furnace casthouse control system, including runner cover controls at tap holes and iron dams, at all times the casthouse is in operation.
  - e) Pursuant to Conditions E-01.12-14.III.2.1-4 and E-01.12-14.III.3.1-2, U.S. Steel must keep weekly records of corrective actions initiated upon observation of visible emissions, and perform weekly non-certified visible emission observations at the baghouse stack and roof monitors.
  - f) Pursuant to Conditions E-01.12-14 and E-01.18, U.S. Steel must at all times operate in compliance with the NESHAP Subpart FFFFF for the blast furnaces and BOP Shop.
  - g) Pursuant to Condition E-01.16.II.B.3, visible emissions from slag skimming operations emitted through the BOP Shop roof monitor are limited to ten percent (10%) opacity on a three-minute average.
  - h) Pursuant to Condition E-01.18.II.B.2, visible emissions from BOP Shop roof monitors are limited to twenty percent (20%) opacity on a three-minute average.
  - i) Pursuant to Condition F-01.05.II.B, visible emissions from A, B, and D blast furnace casthouse baghouse stacks and roof monitors are limited to, respectively, ten percent (10%) and twenty percent (20%) opacity on a six-minute average.
  - j) Pursuant to Condition F-01.07.VI.4, U.S. Steel must at all times comply with the operation and maintenance requirements specified in 40 C.F.R. Part 63 Subpart FFFFF.
6. The Title V regulations at 40 C.F.R. 70.7(b) state that no source subject to Title V may operate the source except in compliance with a Title V permit. Pursuant to 40

C.F.R. 71.5, the owner or operator of a source subject to Title V must submit a permit application which includes all applicable CAA requirements.

7. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1) requires each state to develop and submit to EPA an operating permit program which meets the requirements of Title V. Pursuant to Appendix A of 40 C.F.R. Part 70, on December 4, 2001, EPA granted Michigan final full approval of its Title V Clean Air Act Permit Program. 66 *Fed. Reg.* 62949 and 68 *Fed. Reg.* 63735.
8. The Title V regulations at 40 C.F.R § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.
9. 40 C.F.R. § 70.5(a) requires the owner or operator of a Part 70 source to submit a timely and complete permit application.
10. 40 C.F.R. § 70.5(a)(2) defines "complete application" to include information that is "sufficient to evaluate the subject source and its application and to determine all applicable requirements."
11. 40 C.F.R. § 70.1(b) requires the owner or operator of a Part 70 source to have a permit to operate that assures compliance by the source with all applicable requirements.

#### **Explanation of Violations**

12. On August 25 through 26, 2008, EPA conducted an inspection at U.S. Steel – Great Lakes Works to evaluate the facility's compliance with the Clean Air Act.
13. EPA issued an information request to the facility on October 28, 2008. U.S. Steel responded to this request on December 8, 2008.
14. On August 26, 2008, EPA observed several casthouse runner covers not in place without active work in progress, and particulate exiting the casthouse roof monitor. Failure to maintain runner covers and operate the baghouse control system in a satisfactory manner at all times during blast furnace operation is a violation of Title V Permit Condition E-01.12-14.V.1.
15. U.S. Steel self-reported in its Quarterly Deviation and Compliance Monitoring Reports and in its Environmental Incident Reports the following exceedances at its blast furnace casthouses:

Emission Unit	Date	Time	Average Opacity (%)
B2 Blast Furnace Casthouse Roof	02/06/2006	09:30-09:35	30

B2 Blast Furnace Casthouse Stack	10/20/2006	09:38-09:44	13
B2 Blast Furnace Casthouse Stack	10/20/2006	09:44-09:50	15
B2 Blast Furnace Casthouse Stack	10/20/2006	09:50-09:56	11
B2 Blast Furnace Casthouse Stack	10/20/2006	10:48-10:54	12

Visible emissions exceeding twenty percent (20%) opacity on a six-minute average from blast furnace casthouse roof monitors and ten percent (10%) opacity on a six-minute average from casthouse baghouse stacks are violations of R 336.1358 and R336.1201(3) of the Michigan SIP, Title V Permit Conditions E-01.12-14.II.B and F-01.05.II.B, and 40 C.F.R Part 63, Subpart FFFFF.

16. On August 26, 2008, from 12:20-12:23, EPA observed visible emissions of 11% on a three-minute average from slag skimming exiting the BOP Shop roof monitor.

Time	(M)	0	15	30	45
12:20-12:21	0	0*	0*	0*	15
12:21-12:22	1	45	15	15	25
12:22-12:23	2	15	5	0	0

Visible emissions exceeding ten percent (10%) opacity on a three-minute average from slag skimming exiting the BOP Shop roof monitor are violations of R 336.1201(3) of the Michigan SIP and Title V Permit Condition E-01.16.II.B.3.

17. From 2006 through 2008, U.S. Steel self-reported in its Quarterly Deviation and Compliance Monitoring Reports and Environmental Incident Reports seventy three (73) exceedances at its BOP Shop roof monitors. Data are included as Attachment A. Visible emissions exceeding twenty percent (20%) opacity on a three-minute average from the BOP Shop roof monitors are violations of R 336.1364(2) of the Michigan SIP, Title V Permit Condition E-01.18.II.B.2, and 40 C.F.R Part 63, Subpart FFFFF.
18. On August 25, 2008, from 14:55-15:18, EPA took visible emission readings at Blast Furnace B2 East slag pit at the facility and observed opacity of 6%, 8%, and 6%, respectively, during the following three distinct six-minute averages:

Time	(M)	0	15	30	45
14:56 - 14:57	1	10	10	15	10
14:57 - 14:58	2	5	5	0	0
14:58 - 14:59	3	5	0	5	5
14:59 - 15:00	4	5	10	5	5
15:00 - 15:01	5	5	5	10	10

\* Assumes zero emissions based on interference from waste heat boiler steam.

15:01 - 15:02	6	5	15	5	5
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Time	(M)	0	15	30	45
15:06 - 15:07	1	5	5	10	5
15:07 - 15:08	2	10	10	15	15
15:08 - 15:09	3	5	10	5	15
15:09 - 15:10	4	10	10	5	5
15:10 - 15:11	5	5	10	5	5
15:11 - 15:12	6	0	10	5	5

Time	(M)	0	15	30	45
15:12 - 15:13	1	5	10	5	5
15:13 - 15:14	2	10	5	5	5
15:14 - 15:15	3	0	5	5	5
15:15 - 15:16	4	5	10	5	5
15:16 - 15:17	5	5	5	5	5
15:17 - 15:18	6	5	0*	5	5

The slag pit constitutes a storage pile. Visible emissions exceeding five percent (5%) opacity on a six-minute average from storage piles are violations of R 324.5524(2) of the Michigan SIP and Title V permit Condition B-1.II.B.

19. Pursuant to the October 2008 EPA information request, U.S. Steel provided slag pit opacity readings it had performed at slag pits D2 and B2 since January 1, 2005. These readings include one hundred forty (140) exceedances at slag pits D2 and B2. Data are included as Attachment B. Visible emissions exceeding five percent (5%) opacity on a six-minute average from storage piles are violations of R 324.5524(2) of the Michigan SIP, Title V Permit Condition B-1.II.B, and 40 C.F.R. § 63.6(e).
20. U.S. Steel provided Title V deviation reports submitted to Michigan Department of Environmental Quality (MDEQ) since March 1, 2005, pursuant to the October 2008 EPA information request. These reports include, among other things, two hundred (200) deviations from general required standards and parameters, recordkeeping standards, continuous opacity monitoring (COM) standards, failure to conduct visible emission readings and opacity deviations, and failure to conduct required inspections. Data are included as Attachment C. Failure to operate continuously according to permit requirements is a violation of Title V, the Michigan SIP, and 40 C.F.R. § 63.6(e)(1).
21. U.S. Steel's Operations and Maintenance Plans, developed pursuant to 40 C.F.R. Part 63, Subpart FFFFF, do not contain required operating parameter limits, including damper position parameters, at which the BOP Shop capture systems must operate continuously. Failure to set damper position parameter limits is a violation of 40 C.F.R. § 63.7800(b)(3)(ii) and Title V Permit Condition F-01.07.VI.4.

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\* Assumes zero emissions based on interference from torpedo car plume.

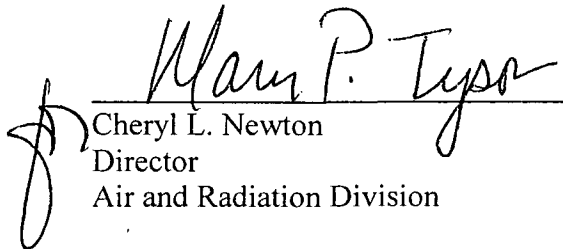


22. On August 25 and 26, 2008, EPA observed emissions from a leaking bell on Furnace B2. These emissions were caused by improper sealing or other malfunction associated with the bell system. U.S. Steel failed to cease production or otherwise take action to return the furnace to its normal operating condition in order to minimize emissions. Failure to actively mitigate emissions caused by known malfunctions is a violation of 40. C.F.R. § 63.6(e)(1) and Title V Permit Condition E-01.13.III.2.4.

#### **Enforcement Authority**

1. Section 113(a) (1) of the Act, 42 U.S.C. § 7413(a)(1), provides that at any time after the expiration of 30 days following the date of the issuance of a Notice of Violation, the Administrator may, without regard to the period of violation, issue an order requiring compliance with the requirements of the state implementation plan or permit, issue an administrative penalty order pursuant to Section 113(d), or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.
2. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides in part that if the Administrator finds that a person has violated, or is in violation of any requirement or prohibition of any rule...promulgated...under...[Title I or Title V of the Act], the Administrator may issue an administrative penalty order under Section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Dated: 09/30/09

  
Cheryl L. Newton  
Director  
Air and Radiation Division

Attachment A: BOP Shop Opacity Deviations, 2006-2008

<b>Emission Unit</b>	<b>Date</b>	<b>Time</b>	<b>Average Opacity (%)</b>
#2 BOP Shop Roof	01/09/2006	11:10 - 11:12	20
#2 BOP Shop Roof	01/09/2006	13:57 - 13:59	28
#2 BOP Shop Roof	01/13/2006	14:35 - 14:37	27
#2 BOP Shop Roof	01/16/2006	12:24 - 12:27	35
#2 BOP Shop Roof	01/23/2006	09:38 - 09:40	35
#2 BOP Shop Roof	01/23/2006	09:41 - 09:43	26
#2 BOP Shop Roof	01/23/2006	10:57 - 10:59	28
#2 BOP Shop Roof	01/23/2006	11:44 - 11:46	21
#2 BOP Shop Roof	01/26/2006	10:41 - 10:43	24
#2 BOP Shop Roof	01/26/2006	11:31 - 11:33	23
#2 BOP Shop Roof	01/27/2006	12:03 - 12:05	65
#2 BOP Shop Roof	01/27/2006	12:06 - 12:08	27
#2 BOP Shop Roof	01/31/2006	13:51 - 13:53	23
#2 BOP Shop Roof	01/31/2006	13:54 - 13:56	32
#2 BOP Shop Roof	01/31/2006	13:57 - 13:59	23
#2 BOP Shop Roof	02/01/2006	13:17 - 13:19	30
#2 BOP Shop Roof	02/01/2006	13:30 - 13:32	26
#2 BOP Shop Roof	02/01/2006	14:08 - 14:10	23
#2 BOP Shop Roof	02/01/2006	14:11 - 14:13	50
#2 BOP Shop Roof	02/02/2006	12:18 - 12:20	24
#2 BOP Shop Roof	02/02/2006	13:20 - 13:22	22
#2 BOP Shop Roof	02/02/2006	13:51 - 13:53	30
#2 BOP Shop Roof	02/02/2006	13:54 - 13:56	24
#2 BOP Shop Roof	02/02/2006	13:57 - 13:59	21
#2 BOP Shop Roof	02/02/2006	14:14 - 14:16	24
#2 BOP Shop Roof	02/06/2006	13:43 - 13:45	28
#2 BOP Shop Roof	02/07/2006	12:52 - 12:55	35
#2 BOP Shop Roof	02/07/2006	13:35 - 13:38	24
#2 BOP Shop Roof	02/07/2006	13:38 - 13:41	36
#2 BOP Shop Roof	02/10/2006	10:00 - 10:02	50
#2 BOP Shop Roof	02/10/2006	10:41 - 10:43	27
#2 BOP Shop Roof	02/15/2006	13:05 - 13:07	43
#2 BOP Shop Roof	02/15/2006	13:22 - 13:25	26
#2 BOP Shop Roof	02/15/2006	14:01 - 14:03	37
#2 BOP Shop Roof	02/20/2006	12:37 - 12:39	36
#2 BOP Shop Roof	02/20/2006	13:03 - 13:05	25
#2 BOP Shop Roof	02/20/2006	13:16 - 13:18	23
#2 BOP Shop Roof	03/02/2006	13:06 - 13:09	21
#2 BOP Shop Roof	03/02/2006	13:09 - 13:12	33
#2 BOP Shop Roof	03/02/2006	13:18 - 13:20	63
#2 BOP Shop Roof	03/02/2006	13:21 - 13:23	53
#2 BOP Shop Roof	03/03/2006	13:40 - 13:42	28

#2 BOP Shop Roof	03/06/2006	12:34 - 12:36	32
#2 BOP Shop Roof	03/06/2006	12:41 - 12:43	37
#2 BOP Shop Roof	03/06/2006	12:44 - 12:46	46
#2 BOP Shop Roof	04/18/2006	08:13 - 08:15	28
#2 BOP Shop Roof	04/18/2006	08:33 - 08:35	23
#2 BOP Shop Roof	04/18/2006	08:54 - 08:56	32
#2 BOP Shop Roof	04/18/2006	08:57 - 08:59	44
#2 BOP Shop Roof	04/18/2006	09:00 - 09:02	58
#2 BOP Shop Roof	04/18/2006	09:03 - 09:05	42
#2 BOP Shop Roof	04/18/2006	09:06 - 09:08	32
#2 BOP Shop Roof	04/18/2006	09:10 - 09:12	23
#2 BOP Shop Roof	04/18/2006	09:37 - 09:39	23
#2 BOP Shop Roof	04/18/2006	10:15 - 10:18	24
#2 BOP Shop Roof	04/19/2006	09:00 - 09:02	33
#2 BOP Shop Roof	05/11/2006	09:49 - 09:51	24
#2 BOP Shop Roof	05/11/2006	09:52 - 09:54	28
#2 BOP Shop Roof	05/11/2006	09:55 - 09:57	21
#2 BOP Shop Roof	05/18/2006	10:43 - 10:45	21
#2 BOP Shop Roof	05/18/2006	10:48 - 10:51	20
#2 BOP Shop Roof	05/18/2006	11:22 - 11:24	23
#2 BOP Shop Roof	05/19/2006	11:18 - 11:20	26
#2 BOP Shop Roof	05/19/2006	11:21 - 11:23	32
#2 BOP Shop Roof	05/19/2006	11:24 - 11:26	45
#2 BOP Shop Roof	05/19/2006	11:27 - 11:29	38
#2 BOP Shop Roof	06/23/2006	14:26 - 14:29	30
#2 BOP Shop Roof	09/11/2006	13:35 - 13:38	22
#2 BOP Shop Roof	11/16/2006	13:23 - 13:26	35
#2 BOP Shop Roof	11/17/2006	09:44 - 09:46	27
#2 BOP Shop Roof	10/27/2007	08:33 - 08:35	22
#2 BOP Shop Roof	08/29/2008	11:03 - 11:06	25
#2 BOP Shop Roof	11/05/2008	13:21 - 13:24	33

Attachment B - Slag Pit Opacity Deviations, 2006-2008

<b>Emission Unit</b>	<b>Date</b>	<b>Time</b>	<b>Average Opacity (%)</b>
Slag Pit B2	01/09/2006	09:50-09:55	9
Slag Pit B2	01/19/2006	10:00-10:05	9
Slag Pit D2	01/26/2006	08:00-08:05	9
Slag Pit D2	02/02/2006	10:17-10:22	6
Slag Pit D2	02/02/2006	10:33-10:38	6
Slag Pit D2	02/22/2006	10:39-10:44	9
Slag Pit D2	02/28/2006	08:18-08:23	12
Slag Pit D2	02/28/2006	08:24-08:29	12
Slag Pit D2	02/28/2006	08:30-08:35	11
Slag Pit D2	04/01/2006	07:13-07:18	10
Slag Pit D2	04/01/2006	07:19-07:24	10
Slag Pit D2	04/11/2006	08:30-08:35	8
Slag Pit D2	04/11/2006	08:36-08:41	9
Slag Pit D2	04/11/2006	08:42-08:47	8
Slag Pit D2	04/11/2006	08:48-08:53	9
Slag Pit D2	04/11/2006	08:54-08:59	10
Slag Pit D2	04/25/2006	08:30-08:35	9
Slag Pit D2	04/25/2006	08:36-08:41	10
Slag Pit D2	05/01/2006	08:22-08:27	7
Slag Pit D2	05/01/2006	08:30-08:35	6
Slag Pit D2	05/01/2006	08:36-08:41	6
Slag Pit D2	05/01/2006	08:42-08:47	6
Slag Pit D2	05/16/2006	09:00-09:05	11
Slag Pit D2	05/16/2006	09:06-09:11	8
Slag Pit D2	05/16/2006	09:12-09:17	8
Slag Pit D2	05/16/2006	09:18-09:23	8
Slag Pit D2	05/16/2006	09:24-09:29	9
Slag Pit B2	05/17/2006	10:10-10:15	9
Slag Pit B2	05/17/2006	10:21-10:26	9
Slag Pit B2	05/17/2006	10:27-10:32	9
Slag Pit B2	05/17/2006	10:33-10:38	8
Slag Pit D2	05/22/2006	08:37-08:42	7
Slag Pit B2	05/30/2006	14:00-14:05	10
Slag Pit B2	05/30/2006	14:06-14:11	11
Slag Pit B2	05/30/2006	14:12-14:17	12
Slag Pit B2	05/30/2006	14:18-14:23	9
Slag Pit D2	05/31/2006	08:09-08:14	6
Slag Pit D2	06/07/2006	08:45-08:50	13
Slag Pit D2	06/07/2006	08:51-08:56	13
Slag Pit D2	06/07/2006	08:57-09:02	12
Slag Pit D2	06/07/2006	09:03-09:08	12
Slag Pit D2	06/07/2006	09:09-09:12	13

Slag Pit D2	06/27/2006	10:01-10:06	10
Slag Pit D2	06/27/2006	10:07-10:12	9
Slag Pit D2	06/27/2006	10:13-10:18	8
Slag Pit D2	06/27/2006	10:19-10:24	7
Slag Pit B2	07/24/2006	08:35-08:40	8
Slag Pit D2	07/25/2006	09:15-09:20	10
Slag Pit D2	07/25/2006	09:21-09:26	8
Slag Pit D2	07/25/2006	09:27-09:32	8
Slag Pit D2	07/25/2006	09:33-09:38	7
Slag Pit D2	7/25/2006	09:39-09:44	8
Slag Pit D2	08/02/2006	09:05-09:10	8
Slag Pit D2	08/02/2006	09:15-09:20	10
Slag Pit D2	08/07/2006	09:06-09:11	7
Slag Pit D2	08/21/2006	10:18-10:23	7
Slag Pit D2	08/21/2006	10:24-10:29	6
Slag Pit D2	08/29/2006	08:47-08:52	8
Slag Pit D2	08/29/2006	08:53-08:58	11
Slag Pit D2	08/29/2006	08:59-09:04	9
Slag Pit B2	09/12/2006	09:10-09:15	6
Slag Pit B2	09/12/2006	09:26-09:31	7
Slag Pit B2	09/12/2006	09:34-09:39	7
Slag Pit B2	09/22/2006	09:20-09:25	9
Slag Pit D2	09/28/2006	09:02-09:07	11
Slag Pit D2	09/28/2006	09:08-09:13	8
Slag Pit D2	10/10/2006	09:04-09:09	7
Slag Pit D2	10/10/2006	09:10-09:15	7
Slag Pit D2	10/10/2006	09:16-09:21	7
Slag Pit D2	10/10/2006	09:22-09:27	8
Slag Pit B2	11/14/2006	08:05-08:10	7
Slag Pit B2	11/14/2006	08:11-08:16	7
Slag Pit B2	11/14/2006	08:17-08:22	7
Slag Pit B2	11/23/2006	07:45-07:50	9
Slag Pit B2	11/23/2006	07:51-07:56	10
Slag Pit B2	11/23/2006	07:57-08:02	8
Slag Pit B2	11/23/2006	08:03-08:08	7
Slag Pit B2	11/23/2006	08:09-08:14	7
Slag Pit D2	12/01/2006	09:00-09:05	7
Slag Pit D2	12/06/2006	09:30-09:35	12
Slag Pit D2	12/06/2006	09:36-09:41	11
Slag Pit D2	12/06/2006	09:42-09:47	10
Slag Pit D2	12/06/2006	09:48-09:53	10
Slag Pit D2	12/06/2006	09:54-09:59	10
Slag Pit D2	12/12/2006	10:02-10:07	7
Slag Pit D2	12/12/2006	10:08-10:13	6
Slag Pit D2	12/12/2006	10:18-10:23	8

Slag Pit D2	12/12/2006	10:24-10:29	8
Slag Pit B2	12/18/2006	09:25-09:30	7
Slag Pit B2	12/18/2006	09:31-09:36	7
Slag Pit B2	01/19/2007	08:41-08:46	7
Slag Pit B2	01/19/2007	08:47-08:52	7
Slag Pit B2	01/19/2007	08:53-08:58	6
Slag Pit D2	01/22/2007	09:11-09:16	6
Slag Pit D2	01/22/2007	09:17-09:22	6
Slag Pit D2	01/22/2007	09:23-09:28	7
Slag Pit D2	01/22/2007	09:29-09:34	7
Slag Pit D2	01/30/2007	09:32-09:37	6
Slag Pit D2	02/05/2007	09:10-09:15	9
Slag Pit D2	02/05/2007	09:16-09:21	6
Slag Pit D2	02/05/2007	09:22-09:27	7
Slag Pit D2	02/05/2007	09:28-09:33	8
Slag Pit D2	02/05/2007	09:33-09:38	8
Slag Pit B2	02/20/2007	10:15-10:20	9
Slag Pit B2	02/20/2007	10:21-10:26	9
Slag Pit B2	02/20/2007	10:27-10:32	6
Slag Pit B2	02/20/2007	10:33-10:38	7
Slag Pit B2	02/20/2007	10:39-10:44	7
Slag Pit B2	02/27/2007	09:07-09:12	7
Slag Pit B2	02/27/2007	09:17-09:22	9
Slag Pit B2	02/27/2007	09:23-09:28	8
Slag Pit B2	02/27/2007	09:29-09:34	8
Slag Pit D2	03/06/2007	08:48-08:53	8
Slag Pit D2	03/06/2007	08:54-08:59	8
Slag Pit D2	03/06/2007	09:00-09:05	7
Slag Pit D2	03/06/2007	09:06-09:11	8
Slag Pit D2	03/16/2007	12:05-12:10	8
Slag Pit D2	03/16/2007	12:11-12:16	11
Slag Pit D2	03/16/2007	12:17-12:22	10
Slag Pit D2	03/16/2007	12:23-12:28	9
Slag Pit B2	04/03/2007	08:15-08:20	6
Slag Pit B2	04/03/2007	08:21-08:26	9
Slag Pit B2	04/03/2007	08:27-08:32	7
Slag Pit B2	04/03/2007	08:33-08:38	7
Slag Pit B2	04/03/2007	08:39-08:44	6
Slag Pit D2	06/16/2007	12:29-12:34	11
Slag Pit D2	06/16/2007	12:35-12:40	12
Slag Pit D2	06/16/2007	12:41-12:46	10
Slag Pit D2	07/16/2007	13:45-13:55	78
Slag Pit D2	10/23/2007	12:03-12:08	9
Slag Pit D2	10/23/2007	14:26-14:32	25
Slag Pit D2	10/31/2007	08:08-08:13	8

Slag Pit D2	01/08/2008	08:46-08:51	7
Slag Pit D2	02/06/2008	08:51-08:56	10
Slag Pit D2	05/02/2008	08:30-08:35	7
Slag Pit D2	07/30/2008	07:50-07:55	10
Slag Pit B2	08/25/2008	14:55-15:00	10
Slag Pit B2	08/25/2008	15:05-15:10	7
Slag Pit B2	08/25/2008	15:11-15:16	6
Slag Pit B2	09/10/2008	07:47-07:52	9

Attachment C: Title V Deviations submitted to MDEQ since March 1, 2005

Year	Date	Description of Deviation	Source / Unit	Condition No./ Reference
2005	3/1 - 6/30	The preliminary stack test for B2 showed that the baghouse would not pass a compliance test.	A, B, D Blast Furnace	F-01.05 III.B.3.1
2005	5/31, 6/1	The bleeder seal did not properly reseal.	D Blast Furnace	A-1, #2 Malf.
2005	March to June (various)	Water flow and hydrogen peroxide operational status records periodically missing.	A, B, D Slag Pits	F01.06 IIIA2.1-2
2005	3/1 - 6/30	Records are missing regarding sweeping twice a day and road sweeping was not conducted at the proper frequency.	ZI Fug Dust	F-01.10, V.A.1
2005	3/1 - 5/31	Improper dilution rate was used by the road sprayer.	ZI Fug Dust	F-01.10 V.B.2
2005	3/1 - 6/30	The following were not conducted: truck ID, freeboard, permanent & temporary truck inspections and vehicle exhausts.	ZI Fug Dust	F-01.10, V.H.
2005	3/1 - 6/30	Paved lot accesses were not swept twice a day, and the dilution rate was incorrect	ZI Fug Dust	F-01.10, V.C.
2005	3/1 - 6/30	Truck bodies were not inspected & vehicle exhausts were not inspected.	ZI Fug Dust	F-01.10, V.G
2005	March	Monthly certified #1 baghouse roof observation not conducted	BOP Charging	E-01.17, III.B.3.2
2005	4/24 (week of), 6/6 (week of)	Week of 4/24 the weekly flux handling conveyor enclosure inspection was not conducted & 6/6 the reading was abnormal.	Flux System	E-01.20, III.A.3.1
2005	April	The monthly certified reading was not conducted.	Flux Operations	E-01.20, III.A.3.2
2005	1/6 - 2/2, 2/6, 5/24, 6/23-6/29	Low exhaust flow ventilation rate (as required by NSPS)	BOP	E-01.16 IV.4
2005	3/1 - 6/30 (various)	COM readings from the BOP ESP Stack	BOP ESP	E-01.18 II.2
2005	March	Failure to conduct monthly inspection of baghouse	Vacuum Degasser	E-01.05 III 3.A.2
2005	3/1 - 6/30	Failure to record the daily pressure drop across the baghouse on the weekends	BOP Charging No. 1 Baghouse	E-01.07 III.2.1



2005	3/1 - 6/30	Failure to record the daily pressure drop across the baghouse on the weekends	BOP - HMT No. 2 Baghouse	E-01.16 III.2.3
2005	3/1 - 6/30	Logbook not being maintained. Proper work was performed on the COM but the work was not entered into the logbook.	BOP ESP	E-01.18, III.2.2
2005	May 29 (week of)	Weekly non-certified #1 baghouse roof observation not conducted	BOP Charging	E-01.07, III.A.1
2005	3/1, 4/10, 5/10, 6/10	Method 9 visible emissions (VE) readings from the BOP shop roof monitor	#2 BOP Shop	F-01.07, III.3.2
2005	June 9 (week of)	Method 9 VE readings from the BOP ESP stack	BOP Vessels	E-01.18, III.A.3
2005	3/1 - 6/30	Failure to inspect the equipment at the BOP in accordance with Appendix C of Consent Order 96-10	BOP	F-01.07 VI.2
2005	3/1 - 6/30	Failure to develop and implement SMP for equipment in Appendix D of Consent Order 96-10	BOP	F-01.07 VI.3
2005	March	Monthly VE reading not conducted at #2 baghouse stack	#2 BOP	E-01.16, III.A.3.2
2005	5/15 (week of)	The weekly non-certified vacuum degasser baghouse stack, roof monitor and process flare readings were not conducted	Vacuum Degasser	F-01.05, III.A.3.1
2005	3/13 (week of)	A weekly non-certified BOP roof reading was not conducted.	#2 BOP Shop	F-01.07, III.3.1
2005	3/30	An abnormal non-certified reading was taken at the BOP roof monitor.	#2 BOP Shop	F-01.07, III.3.1
2005	3/1 - 6/30	Failure to record the pressure drop across the baghouse filters daily	No. 1 Argon Stir Station	E-01.03 III.2.1
2005	3/1 - 6/30	Failure to record the pressure drop across the baghouse filters daily	LMF Facility	E-01.04 III.2.1
2005	3/1 - 6/30	Failure to record the pressure drop across the baghouse filters daily	Vacuum Degassing	E-01.05 III.2.4
2005	May	Failure to conduct monthly inspection of baghouse	LMF	F-01.04 III.A.3.2

2005	3/1 - 6/30	Failure to conduct inspection of flare at least once every six months	Vacuum Degasser	E-01.05 III.A.3.3
2005	5/15 (week of)	A non-certified reading on the vacuum degasser boiler stack was not conducted the week of May 15.	Vac Deg Boiler	E-01.06, III.A.3
2005	3/13 (week of), 3/27 (week of)	A weekly non-cert reading was not conducted weekly at the Kish Wetting Station.	Kish Wetting Stat.	E-01.07, III.A.3.1
2005	March	A monthly certified kish wetting station visible emission reading was not conducted	Kish Wetting Stat.	E-01.07, III.A.3.2
2005	3/10	Scrubber $\Delta P$ fell below range of 3-10 in w.d. due to equipment malfunction	Pickle Line	E-01.08 III.2
2005	3/1 - 6/30	Failure to conduct required semiannual inspections at HCL storage vessels	Pickle Line	E-01.08 VI.6
2005	3/1 - 6/30	Failure to record and keep records of mist eliminator water flow rate daily	EGL - Storage Tanks	E-01.10 III.2
2005	March - 4 days	Failure to maintain minimum water flow rate of 50 gpm at the electrolytic cleaner scrubber	CGL	E-01.11 V.2
	April - 17 days			
	May - 1 day			
	June - 1 day			
2005	3/1 - 4/30	Incorrect dilution ratio	Main Plant Fugitive Dust	F-01.09 V.B.2
2005	3/1 - 6/30	Failure to implement required fugitive dust control measures for water flushing	Main Plant Fugitive Dust	F-01.09, A1, A-2a, 3a, 3c, C2
2005	3/1 - 6/30	Failure to conduct observations of transportation of bulk materials	Main Plant Fugitive Dust	F-01.09 D3
2005	4/28	DTE overpressurized the system allowing a dust cloud to appear.	PCI Transport System	III.A.3.1
2005	3/1 - 6/30	The pressure drop is not being recorded daily across the transport system fabric filter dust collector.	PCI Transport System	III.A.2.3
2005	3/1 - 6/30	The pressure drop is not being recorded daily across the pulverized coal silo and injection vessel.	PCI Transport System	III.A.2.4

2005	B2 - 8/13, 9/6, 9/20, 11/9, 11/10, 11/11	Water flow and hydrogen peroxide operational status records periodically missing.	FG-SLAG-PITS	F-01.06 III.A.2.1- 2
	D4 - 7/4, 7/5, 7/9, 7/10, 7/12, 7/13, 7/17, 7/18			
	D4 - 8/8, 8/15, 8/23, 8/24, 8/25, 8/31			
	D4 - 9/7			
	D4 - 10/3			
	D4 - 11/9			
2005	7/1, 7/2, 7/5-7/8, 7/11-7/15, 7/19, 7/22, 7/25, 7/28, 7/29	Roads were not swept twice a day at Zug Island.	ZI Fug Dust	F-01.10, V.A.1
	8/1-8/5, 8/8, 8/9, 8/11, 8/12, 8/15- 8/19, 8/22-8/26, 8/29, 8/31			
	9/1, 9/2, 9/5-9/9, 9/12-9/16, 9/20, 9/21, 9/27, 9/28, 9/30			
	10/4-10/6, 10/10- 10/12, 10/14			
	11/2-11/4, 11/14, 11/18, 11/24, 11/29, 11/30			
	12/1, 12/23, 12/26- 28, 12/30			
2005	7/4, 7/11, 7/18, 7/25, 8/8, 8/15, 8/22, 8/29, 9/5, 9/12, 10/24, 12/19, 12/26	Paved lot accesses were not swept once a week.	ZI Fug Dust	V.C.1
2005	7/14	Opacity was over 6-min 20% opacity average for the dust catcher	SW Fug Dust	II.B
2005	7/4, 7/11, 7/18, 7/25, 7/31, 8/1, 8/8, 8/15, 8/22, 8/29, 9/5, 9/12, 9/19, 9/26, 10/3, 10/10	Transportation of bulk materials observations were not made 5 times a week	MP/80 Fug Dust	F-01.09 V.D.3
2005	7/1-7/31, 8/1-8/3, 9/1-9/11	Water flushing was being conducted sometimes but did not have a formal documentation until Sep 11	MP/80 Fug Dust	F-01.09 V.A.1, A- 2a
2005	7/11, 7/13, 7/26 8/10, 8/17, 8/18, 8/23	Opacity of fugitive VE from a building or enclosure containing hot metal transfer	#2 BOP Shop	F-01.07, II.B.1 and F-01.07, II.B.2

	9/8, 9/9	operation shall not exceed 20% 3-min average		
	10/3, 10/5, 10/10, 10/14, 10/20, 10/24, 10/26			
	11/4, 11/7, 11/11, 11/14, 11/17, 11/21			
	12/6, 12/19, 12/21, 12/22, 12/23, 12/27, 12/30			
2005	unknown	Operated the hot metal transfer station and both hot metal desulfurization / skimming stations simultaneously	#2 Basic Oxy Proc	E-01.16, V.2
2005	7/11, 7/13, 7/26	Visible emission from roof monitors shall not exceed 20% opacity 3-min average	Basic Oxygen Vessel	E-01.18, II.B.2
	8/10, 8/17, 8/18, 8/23			
	9/8, 9/9			
	10/3, 10/5, 10/10, 10/14, 10/20, 10/24, 10/26			
	11/4, 11/7, 11/11, 11/14, 11/17, 11/21			
	12/6, 12/19, 12/21, 12/22, 12/23, 12/27, 12/30			
2005	various	Failure to maintain log book recording by date and activity of all cleaning, inspection, calibration and certification on COM	Basic Oxygen Vessel	E-01.18, III.A.2.2
2005	7/2, 7/3, 7/5-7/7, 7/9- 7/17, 7/20-7/26, 7/28-7/31	Pressure drop baghouse filters, recorded daily (#2 Baghouse)	#2 Basic Oxy Proc	E-01.16, III.A.2.3
	8/2, 8/5-8/10, 8/12- 8/17, 8/19-8/31			
	9/1-9/5, 9/10, 9/11, 9/13-9/15, 9/17, 9/18, 9/20-9/23, 9/25, 9/27, 9/28			
	10/1, 10/2, 10/8, 10/9, 10/11, 10/15, 10/16, 10/18, 10/19, 10/22, 10/23, 10/25, 10/27, 10/29-10/31			
	12/3, 12/9, 12/13, 12/14, 12/17			

2005	unknown - between 7/1 and 12/31	Failure to calibrate, operate and maintain a monitoring device that continually measures and records...exhaust ventilation...each steel cycle	#2 Basic Oxy Proc	E-0.16, III.A.3.3
2005	7/31, 8/16, 9/22-9/24, 10/15, 10/16, 11/9, 11/15, 12/12	Low exhaust flow ventilation rate (as required by NSPS)	#2 Basic Oxy Proc	E-01.16, IV.4
2005	7/1 - 12/31	Shall not operate the two main BOP Vessels unless the ESP is installed and operating properly	Basic Oxygen Vessel	E-01.18, V.5
2005	7/1 - 12/31 (various)	COM reading from the ESP Stack	BOP ESP	A-1.2
2005	various	Failure to record daily pressure drop across the baghouse.	BOP Charging	E-01.07, III.A.2.1
2005	unknown - between 7/1 and 12/31	Failed to record and keep file all monitoring data and calibration and certification performed on COM.	Basic Oxygen Vessel	E-01.18, III.A.2.4
2005	unknown - between 7/1 and 12/31	Failed to inspect and clean the opacity monitor a minimum of once every two months	Basic Oxygen Vessel	E-01.18, V.2
2005	9/6, 10/7	An abnormal non-certified reading was taken at the BOP ESP Stack.	BOP	F-01.11, III.A.3.1
2005	9/25 (week of)	Week of 9/25 the weekly flux handling conveyor enclosure non certified reading was not conducted.	Flux Systems	E-01-.20, III.A.3.1
2005	September	The monthly certified reading was not conducted of the Lime Truck Transferring enclosure building.	Flux Systems	E-01.20, III.A.3.2
2005	December	Failure to operate foam system	Flux Systems	A-1, General Conditions
2005	7/1 - 12/31	Opacity shall not exceed 20% 6-min average	Tapping Operations	F-01.11, II.B
2005	7/1 - 12/31	VE from slag skimming operations emitted through #2 BOP Shop roof monitor shall not exceed an emission limit of 10% 3-min average	Basic Oxygen Process	E-01.16, II.B.3
2005	7/1 - 12/31	Failure to maintain and keep on file - dates of inspections performed in accordance with Appendix A	Flux System	E-01.20, III.A.2

2005	unknown - between 7/1 and 12/31	Failure to implement and maintain Standard Maintenance Procedures (SMPs) for the specified components.	Flux System	E-01.20, V.2
2005	9/21-23, 10/7	Failure to initiate appropriate corrective action upon observation of VE exceeding the applicable visible emission limits	Tapping	F-01.11, III.A.3.2
2005	unknown - between 7/1 and 12/31	Failed to inspect equipment in accordance with the schedule in Appendix 9	#2 BOP Shop	F-01.07, III.A.2.3
2005	unknown - between 7/1 and 12/31	Fail to inspect equipment in accordance with the schedule in Appendix C	#2 BOP Shop	F-01.07, VI.2
2005	unknown - between 7/1 and 12/31	Fail to implement and maintain Standard Maintenance Plan for the equipment specified in Appendix D	#2 BOP Shop	F-01.07, VI.3
2005	7/13-7/21, 7/26-7/31	Failure to record and keep records of mist eliminator water flow rate daily	EGL - Storage Tanks	E-01.10 III.2
	8/1-8/18, 8/20-8/31			
	9/1-9/30			
	10/1-10/9, 10/11			
2005	8/5, 8/6, 9/2, 9/6, 9/17, 10/3, 12/16	Failure to record and keep records of Ion Reactor water flow rate daily	EGL - Operations	E-01.10 III.A.2.2
2005	8/5, 8/6, 9/17, 10/3	Failure to record and keep records of Operation Scrubber scrubber pressures and pump/fan amps where available.	EGL - Operations	E-01.09 III.A.2.1 and 2
2005	4th Quarter	Failure to conduct, record and file 4th quarter cylinder gas audit on Nox and Oxygen analyzers	CGL	E-01.11 V.4
2005	7/17	Failure to maintain minimum water flow rate of 50 gpm at the electrolytic cleaner scrubber	CGL	E-01.11 V.2
	8/5, 8/9, 8/17, 8/19, 8/26, 8/27, 8/29, 8/30			
	9/23			
	10/22-10/24			
	11/1-11/3, 11/11, 11/15, 11/23			
	12/7, 12/8			

2005	11/15	Failure to collect water flow rate daily.	CGL	E-01.11 III.A.2.5
2005	12/13 - 12/31	Operated the vacuum degassing ladle metallurgy additive handling system while baghouse was not operating.	Vacuum Degassing	E.01.05 V.4
2005	Jul, Aug, Sep, Nov, Dec	Failure to inspect baghouse monthly	Vacuum Degassing	E-01.05 III.A.3.2
2005	12/13 - 12/31	Failure to initiate appropriate maintenance activity on the baghouse if the pressure drop exceed the normal range.	Vacuum Degassing	E.01.05 III.A.2.4
2005	12/12, 12/21, 12/28	Weekly non-certified VE was conducted except baghouse was down and vacuum degassing activity was being performed.	Vacuum Degassing	E.01.05 III.A.3.1
2005	12/13 - 12/31	Operated the vacuum degassing operations while baghouse was not operating.	Vacuum Degassing	E.01.05 V.3
2005	7/1-7/31, 8/1-8/31, 9/1-9/30, 10/1-10/5	Failure to record the pressure drop across the baghouse filters daily	No. 1 Argon Stir Station	E-01.03 III.2.1
2005	7/1-7/31, 8/1-8/31, 9/1-9/30, 10/1-10/5	Failure to record the pressure drop across the baghouse filters daily	LMF Facility	E-01.04 III.2.1
2005	7/1-31, 8/1-31, 9/1-30, 10/1-5, 11/1-30, 12/3, 12/11-31	Failure to record the pressure drop across the baghouse filters daily	Vacuum Degassing	E.01.05 III.2.4
2005	10/19	Electrical Dept closed a breaker to change some temporary wiring to permanent. Electrical closed breaker and it shut down the fume exhaust blower and recirculation pump.	Pickle Line	E-01.08 III.A.3.3
	12/21	13.2 KV Main Breaker tripped	Pickle Line	E-01.08 III.A.3.3
2005	10/18-10/31, 11/1-11/30, 12/1-31/	Failure to record daily flow rates to fume scrubber.	EGL - ION Reactor	E-01.08 III.A.2.1
2005	10/18-10/31, 11/1-11/30, 12/1-12/31	Failure to keep flow rates to fume scrubber and records for any flow alarms	EGL - ION Reactor	E-01.08 III.A.2.2
2005	7/21	The baghouse was down and not operating.	B BF Cast. Oper.	V.I
2005	7/25	The baghouse malfunctioned due to a PLC problem.	B BF Cast. Oper.	V.I
2005	9/12	The cages collapsed and therefore made the filters not operate properly.	PCI Transport System	II.B

2006	1/25	Water flow and hydrogen peroxide operational status record missing	FG-SLAG-PITS	F-01.06III.A.2.1-2
2006	2/6	Roof emissions were over a 20% 6-min average while the furnace was in the process of coming down	EGBLAST-FCE-B	E-01.13 II.B
2006	2/6	Bleeder emissions were over a 20% 6-min average while the furnace was in the process of coming down	EGBLAST-FCE-B	A-1: Gen. Condition
2006	1/2-1/5, 1/9, 1/11, 1/12, 1/19	Roads were not swept twice a day at Zug Island	FGZUGISLAND-FUGDUS	F-01.10
2006	1/2 (week of), 1/9 (week of), 2/13 (week of)	Paved lot accesses were not swept once a week	FGZUGISLAND-FUGDUS	V.C.1
2006	3/13, 3/15	Due to high pressure in the furnace the dirty gas bleeder opened	EGBLAST-FCE-B	A-1: Gen. Condition
2006	3/10	VE were seen coming from the Hot Strip Mill roof	EG80MILLFURNCS	E-01.19.III.A.3
2006	3/14	Failure to collect daily water flow rate	CGL	E-01.11 III.A.2.5
2006	6/19, 6/23-6/25	Failure to record and keep records of EGL solution storage and recirculation tanks scrubber system pressures daily	EGL - Storage Tanks	E-01.10 III.2.1
2006	5/12	Failure to record and keep records of daily water flow readings for the EGL ion reactor fume scrubber	EGL - Ion Reactor	F-01.08 III.2.2
2006	1/1 - 6/30	Failed to maintain and keep on file - dates of inspections performed in accordance with Appendix A	Flux System	E-01.20, III A 3
2006	1/1 - 6/30	Failure to implement and maintain Standard Maintenance Procedures (SMPs) for the specified components	Flux System	E-01.20, V.2
2006	1/1 - 6/30	Failed to inspect equipment in accordance with the schedule in Appendix C	#2 BOP Shop	F-01.07, VI 2
2006	1/1 - 6/30	Fail to implement and maintain Standard Maintenance Plan for the equipment specified in Appendix D	#2 BOP Shop	F-01.07, VI.3



2006	1/1 - 6/30	Fail to inspect equipment in accordance with the schedule in Appendix C	#2 BOP Shop	F-01.07, III A 2 3
2006	1/1 - 5/21	Shall not operate the two main BOP Vessels unless the ESP is installed and operating properly	Basic Oxygen Vessel	E-01.18, V.5
2006	6/6	ESP Continuous Opacity Monitor (COM) had two (2) 6-min opacity readings greater than 20% on Jun. 6: 13:00 - 61%; 13:06 - 43%	Basic Oxygen Vessel	A-1.2
2006	unknown	Failure to conduct inspections according to the requirements of 63.7830(b) (bag leak detection)	BOP	F-01.07, V.4 MACT
2006	unknown	Failure to demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 subpart FFFFF 63.7834	BOP	F-01.07, III.A.2.6 MACT
2006	unknown	Failure to maintain records in accordance to 40 CFR Part 63 Subpart FFFFF 63.7842(d) (O and M Plan)	BOP	F-01.07, III A.3.3 MACT
2006	1/7, 5/9	Low exhaust flow ventilation rate (as required by NSPS)	BOP	E-01.16, IV.4
2006	4/1-4/7	Flow was not measured or recorded during 7 days	BOP	E-01.16, III.A.3.3 and E-01.16, IV.3
2006	6/13	Skimmed pot at West Desulfurization station with no hood	BOP	A-1
2006	1/27, 3/6	Opacity of fugitive VE from a building or enclosure containing hot metal transfer operation shall not exceed 20% 3 min average	#2 BOP Shop	F-01.07, II B.1
2006	1/9, 3/6, 4/18	Opacity of fugitive VE from a building or enclosure containing hot metal transfer operation shall not exceed 20% 3 min average	#2 BOP Shop	F-01.07, II.B.2
2006	5/11, 5/18	VE from roof monitors shall not exceed 20% opacity 3-min average	Basic Oxygen Vessel	E-01.18, II.B.2
2006	1/1 - 5/21	VE from slag skimming operations emitted through #2 BOP Shop roof monitor shall not exceed an emission limit of 10% 3-min average	BOP	E-01.16, II.B.3

2006	6/23	VE from BOP Roof Monitor on June 23 exceeded 20% opacity (26.2%)	BOP	F-01.07, II.B.3 (MACT)
2006	3/26 (week of)	Failure to conduct weekly non-certified observation for LMF Baghouse	LMF	E-01.04, III.A.3
2006	1/1-1/3	Failure to initiate appropriate maintenance activity on the Baghouse if the pressure drops exceed the normal range	Vacuum Degassing	E.01.05, III.A.2.4
2006	1/1-1/3	Operated the vacuum degassing operations while baghouse was not operating	Vacuum Degassing	E.01.05, V.3
2006	1/1-1/3	Operated the vacuum degassing operations while baghouse was not operating	Vacuum Degassing	E.01.05, V.4
2006	1/1-1/3	Failure to record pressure drop across the baghouse filters daily	Vacuum Degassing	E-01.05, III.A.2.4
2006	1/9, 1/13, 1/16, 1/23, 1/26, 1/27, 1/31	VE from roof monitors shall not exceed 20% opacity 3 min average	Basic Oxygen Vessel	E-01 18, II.B.2
	2/1, 2/2, 2/6, 2/7, 2/10, 2/15, 2/20			
	3/2, 3/3, 3/6			
	4/18			
	5/11, 5/18			
2006	1/1 - 5/21	VE from slag skimming operations emitted through #2 BOP Shop roof monitor shall not exceed an emission limit of 10% 3 min average	BOP	E-01.16, II.B.3
2007	1/1 - 6/30	Failed to inspect equipment in accordance with the schedule in Appendix C	#2 BOP Shop	F-01.07, VI.2
2007	1/1 - 6/30	Fail to implement and maintain Standard Maintenance Plan for the equipment specified in Appendix D	#2 BOP Shop	F-01.07, VI.3
2007	1/1 - 6/30	Fail to inspect equipment in accordance with the schedule in Appendix C	#2 BOP Shop	F-01.07, III.A.2.3
2007	unknown	Failure to demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 subpart FFFF 63.7834	BOP	F-01.07, III.A.2.6 MACT

2007	unknown	Failure to maintain records in accordance to 40 CFR Part 63 Subpart FFFFF 63.7842(d) (O and M Plan)	BOP	F-01.07, III.A.3.3 MACT
2007	unknown	Failure to comply with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7800 (a) and (b)	BOP	F-01.07, VI.4 MACT
2007	1/1 - 6/30	Failed to maintain and keep on file - dates of inspections performed in accordance with Appendix A	Flux System	E-01.20, III.A.2
2007	1/1 - 6/30	Failure to implement and maintain Standard Maintenance Procedures (SMPs) for the specified components	Flux System	E-01.20, V.2
2007	4/29 (week of)	Vacuum Degassing Operation went down for maintenance outage, which lasted more than a week. Since operation was down, could not conduct the weekly non-certified observation of the VDG Process, Baghouse Stacks, VDG Flare, Baghouse Dust Collector, VDG Processor	Vacuum Degassing Operations	E-01.05, III.A.3.1
2007	4/29 (week of), 5/6 (week of), 5/13 (week of)	D-4 Blast Furnace went down for maintenance outage which lasted from April 25 to May 21. Could not conduct the non-certified observation for the baghouse emission control	D Blast Furnace Cast House Operations	E-01.14, III.3.1
2007	4/29 (week of), 5/6 (week of), 5/13 (week of)	D-4 Blast Furnace went down for maintenance outage which lasted from April 25 to May 21. Could not conduct the non-certified observation for the cast house roof monitor and certified observation for the cast house roof monitor.	D Blast Furnace Cast House Operations	E-01.14, III.3.2
2007	ZI Attachment 3	Failure to demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 subpart FFFFF 63.7834 (a) and (b)	A, B, D Blast Furnaces	F-01.05, III.A.2.7 MACT

2007	unknown	Failure to maintain records in accordance to 40 CFR Part 63 Subpart FFFFF 63.7842(d) (O and M Plan)	A, B, D Blast Furnaces	F-01.05, III.A.3 MACT
2007	unknown	Failure to comply with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7800 (a) and (b)	A, B, D Blast Furnaces	F-01.05, VI.6 MACT
2007	July - December	Did not obtain second VEO for boiler EGBHZI2-5-Boiler. This boiler was shutdown from September through the end of December for maintenance.	Boilerhouse No. 1 & No. 2	F-01.06, III.B.3
2007	12/6	Hydrogen Peroxide chemical feed pump was not working during inspection	Slag Pits - B Furnace	F-01.06, V and F-01.06, VI
2007	August and October	Failure to conduct inspections according to the requirements of 63.7830(b) - (#1 ESP ID Fan "Month of October" and #3 ESP ID Fan "Month of August")	BOP	F-01.07, VI.4 MACT
2007	August and October	Failure to demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 subpart FFFFF 63.7834 - (#1 ESP ID Fan "Month of October" and #3 ESP ID Fan "Month of August")	BOP	F-01.07, III.A.2.6 MACT
2007	August and October	Failure to maintain records in accordance to 40 CFR Part 63 Subpart FFFFF 63.7842(d) (O and M Plan) - (#1 ESP ID Fan "Month of October" and #3 ESP ID Fan "Month of August")	BOP	F-01.07, III.A.3.3 MACT
2007	10/27	VE from roof monitors shall not exceed 20% opacity 3 min average	#2 BOP Shop	E-01.18, II.B.2
2007	10/27	Opacity of fugitive VE from a building or enclosure containing hot metal transfer operation shall not exceed 20% 3 min average	#2 BOP Shop	F-01.07, II.B.1 and F-01.07, II.B.2
2007	8/15	ESP COM had observe (5) 6 min opacity readings greater than 20% on Aug. 15: 15:48 - 35%; 15:54 - 33%; 16:00 - 25%; 16:06 - 22%; 16:12 - 23%	Basic Oxygen Vessel	A-1.2

2007	12/16	ESP COM had observe (2) 6-min opacity readings greater than 20% on Dec. 16: 21:24 - 23%; 21:36 - 22%	Basic Oxygen Vessel	A-1.2
2007	11/5	Permittee operated the ESP dust silo while the telescoping chute or other equivalent means to the bottom of the ESP dust silo was not operating properly.	Basic Oxygen Vessels	E-01.18, VI.3
2007	10/27	VE from BOP Roof Monitor on October 27 exceeded 20% opacity (22.08%)	#2 BOP Shop	F-01.07, II.B.3 (MACT)
2008	1/22	ESP COM had observe (2) 6-min opacity readings greater than 20% on Jan. 22: 01:07 - 49%; 01:13 - 23%	Basic Oxygen Vessel	A-1.2
2008	5/10	ESP COM had observe (2) 6-min opacity readings greater than 20% on May 10: 06:00 - 26%; 06:06 - 28%	Basic Oxygen Vessel	A-1.2
2008	week of March 30	Did not obtain the non-certified Visible Emissions Observation (VEO) for the casthouse roof monitors. B2 Blast Furnace was shutting down March 30 through April 9, 2008.	B Blast Furnace Cast House Operations	E01.13, III.A.3.1 and E01.13, III.A.3.2

## CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice of Violation and Finding of Violation, No. **EPA-5-09-MI-16** by Certified Mail, Return Receipt Requested, to:

David Rintoul  
General Manager  
United States Steel Corporation, Great Lakes Works  
1 Quality Drive  
Ecorse, Michigan 48229

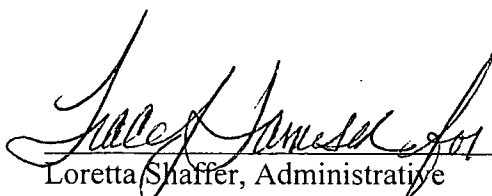
David W. Hacker  
Law Department  
United States Steel Corporation  
600 Grant Street  
Pittsburgh, Pennsylvania 15219-2800

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Tom Hess  
Enforcement Unit Chief  
Michigan Department Environmental Quality  
Air Quality Division  
P.O. Box 30242  
Lansing, Michigan 48909-7742

Wilhemina McLemore  
District Supervisor  
Detroit Field Office  
Michigan Department Environmental Quality  
3058 West Grand Boulevard, Suite 2-300  
Detroit, Michigan 48202-4700

On the 30 day of Sept., 2009

  
Loretta Shaffer, Administrative  
Program Assistant

CERTIFIED MAIL RECEIPT NUMBER: 7001 EB2D 0006 0293 1220