



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

JUN 17 2011

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. 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 or facility). 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 at the facility in August of 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 properly control air emissions while dumping, or beaching iron, while opening blast furnace relief valves, and while operating its blast furnace. This improper operation resulted in excessive levels of particulate matter opacity from these operations.

Specifically, 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.

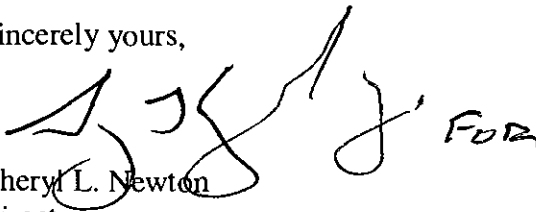
Section 113 of the CAA gives EPA several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply and the steps you will take to

prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Brian Dickens. You may call Brian at (312) 886-6073 to request a conference. 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-5-11-MI-05

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 National Emission Standards for Hazardous Air Pollutants (NESHAP); the Michigan State Implementation Plan (SIP); the Michigan Title V Permit Program and its Title V permit.

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 336.1361, visible emissions from sources in Wayne County, Michigan, including blast furnace stacks, are limited to ten percent (10%) opacity on a six-minute average.

- b) Pursuant to R 336.1301, visible emissions from a process or process equipment are limited to twenty percent (20%) opacity on a six-minute average, except for one six-minute average per hour of not more than 27% opacity.
- c) Pursuant to R 324.5524(2), visible emissions from fugitive sources other than storage piles are limited to twenty percent (20%) opacity on a three-minute average.

Federal CAA Requirements

- 2. 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.
 - a) 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. Pursuant to 40 C.F.R. Part 63.7800(a), Subpart FFFFF, "you must always operate and maintain your affected source... in a manner consistent with good air pollution control practices for minimizing emissions".

Michigan Title V Requirements

- 3. Section 502(d)(1) of 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 FR 62949* and *68 FR 63735*. 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 A-1.2, a person shall not cause to be discharged into the outer air visible emissions of a density greater than the most stringent of R.336.1301(1)(a) or (b), including a maximum of 20% on a six-minute average.
 - b) Pursuant to Condition B-1.II.B, fugitive dust emissions from sources other than storage piles shall not exceed an average of twenty percent (20%) in any one (1) six-minute averaged period as determined in R 324.5524(2).
 - c) Pursuant to Conditions E-01.12 through 14, U.S. Steel must operate in compliance with the NESHAP Subpart FFFFF for the blast furnaces.

4. 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.
5. 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.

Explanation of Violations

6. On August 25 and 26, 2008, EPA conducted an inspection at U.S. Steel – Great Lakes Works to evaluate the facility's compliance with the Clean Air Act.
7. EPA issued an information request to the facility on November 2, 2009. U.S. Steel responded to this request on December 4, 2009, January 25, 2010, and March 10, 2010.
8. U.S. Steel reported that it placed iron to the ground, or beached iron, and emitted visible emissions on the following days:

Emission Unit	Date	Time	Average Opacity (%)
Beaching Metal	11/25/09	0807-0812	21.25
Beaching Metal	11/25/09	0813-0818	23.12
Beaching Metal	11/25/09	0917-0922	33.54
Beaching Metal	11/25/09	0923-0928	70
Beaching Metal	11/25/09	0929-0934	72.29
Beaching Metal	11/25/09	0935-0940	62.7
Beaching Metal	11/25/09	1044-1049	26.62
Beaching Metal	11/25/09	1050-1055	36.66
Beaching Metal	11/25/09	1056-1101	58.33
Beaching Metal	11/25/09	1102-1107	49.58
Beaching Metal	11/25/09	1108-1113	43.75
Beaching Metal	11/25/09	1200-1205	33.54
Beaching Metal	11/25/09	1206-1211	59.16
Beaching Metal	11/25/09	1212-1217	64.37
Beaching Metal	11/25/09	1218-1223	75.41
Beaching Metal	11/25/09	1224-1229	62.5
Beaching Metal	11/25/09	1230-1235	23.75
Beaching Metal	11/25/09	1325-1330	27.91
Beaching Metal	11/25/09	1331-1335	33.12

The above visible emissions from a fugitive source other than storage piles exceeded twenty percent (20%) opacity on a three-minute average in violation of the Michigan SIP at R324.5524(2).

9. U. S. Steel reported that it had emitted opacity from its Blast Furnace relief valves, also known as bleeder stacks, on the following days:

Emission Unit	Date	Time	Average Opacity (%)
D4	11/28/09	1534-1539	86.25
D4	11/28/09	1540-1545	69.79
D4	11/28/09	1546-1551	64.58
D4	11/28/09	1555-1557	56.66
D4	11/28/09	1558-1603	60.83
D4	12/02/09	0753-0758	32.29
D4	12/02/09	0800-0805	21.87
D4	12/02/09	1003-1008	38.54
D4	12/02/09	1009-1014	41.25
D4	12/02/09	1015-1020	57.5
D4	12/02/09	1021-1026	38.75
D4	12/03/09	0813-0818	54.16
D4	12/03/09	0819-0824	44.16
D4	12/03/09	0825-0830	35
D4	12/03/09	0831-0836	20.62
B2	12/26/09	1055-1100	22.08
B2	12/26/09	1101-1106	24.38
D4	1/6/10	1627-1632	45
B2	1/16/10	0910-0915	27.29
B2	1/16/10	0930-0935	20.83
D4	1/20/10	1026-1031	25.42
B2	2/1/10	0157-0202	22.91
B2	2/1/10	0329-0333	23.13
B2	2/2/10	1000-1005	20.42
B2	2/2/10	1009-1015	21.25
B2	2/2/10	1028-1103	20.93
B2	2/2/10	1106-1111	22.92
B2	2/2/10	1159-1204	21.45

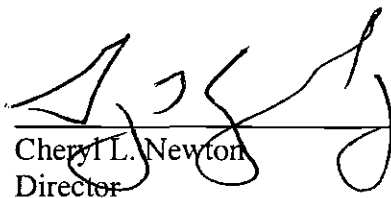
The above visible emissions from process/process equipment exceeded twenty percent (20%) opacity on a six-minute average, except for one six-minute average per hour of not more than 27% opacity, in violation of the Michigan SIP at R 336.1301.

U.S. Steel has demonstrated the ability to open relief valves for planned activities while generating little to no opacity. U.S. Steel has also demonstrated the ability to avoid unplanned relief valve openings, or to emit little to no opacity during unplanned relief valve openings. Because of this, the excessive opacity listed above indicates a failure to use good air pollution control practices for minimizing emissions, in violation of 40 C.F.R. Part 63.7800(a), Subpart FFFFF.

Environmental Impact of Violations

10. These violations have caused or can cause excess emissions of opacity, particulate matter, carbon monoxide (CO) and hazardous air pollutants.
11. Excess opacity increases public exposure to unhealthy particulate matter. Excess emissions of particulate matter increase public exposure to fine particulates. Fine particulate matter contributes to respiratory problems, lung damage and premature deaths.
12. Excess emissions of CO increase public exposure to CO, which can enter the bloodstream and reduce oxygen delivery to the body. CO can also aggravate cardiovascular disease.
13. Particulate matter from iron and steel manufacturing contains lead, manganese and other compounds that are considered to be Air Toxics and are especially harmful to human health and the environment. Chronic (long-term) exposure to high levels of manganese by inhalation in humans may result in central nervous system and respiratory effects. Manganese can affect visual reaction time, hand steadiness, and eye-hand coordination. Lead affects the nervous system. Children are particularly sensitive to the neurotoxic effects of lead and there is evidence that lead may affect the hearing threshold and growth in children. Other effects from chronic lead exposure in humans include effects on blood pressure and kidney function, and interference with vitamin D metabolism.

Dated: 6/17/11


Cheryl L. Newton
Director
Air and Radiation Division

FOR

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice of Violation and Finding of Violation, No. **EPA-5-11-MI-05** by Certified Mail, Return Receipt Requested, to:

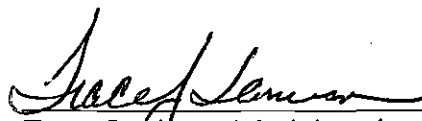
David Rintoul
General Manager
United States Steel Corporation, Great Lakes Works
1 Quality Drive
Ecorse, Michigan 48229

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:

Bernard Sia
Michigan Department of Environmental Quality
3058 West Grand Boulevard, Suite 2-300
Detroit, Michigan 48202-6058

On the 20 day of June, 2011



Tracy Jamison, Administrative
Program Assistant

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7660 8886
7009 1680 0000 7660 8893