



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
DETROIT



KEITH CREAGH
DIRECTOR

May 27, 2016

Mr. James Gray, General Manager
United States Steel Great Lakes Works
No. 1 Quality Drive
Ecorse, MI 48229

SRN: A7809, Wayne County

Dear Mr. Gray:

VIOLATION NOTICE

On May 17, 2016, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted certified Method 9 visible emissions readings of the No.2 BOP Shop at U.S. Steel Great Lakes Works ("U.S. Steel") located at No. 1 Quality Drive, Ecorse, Michigan. Additionally, on May 24, 2016, AQD completed review of the March 2016 BOP Roof Monitor and ESP Stack Compliance Demonstration Report, the July – December 2015 semi-annual deviation report, and the 2015 annual deviation report. The purpose of these readings and review was to determine U.S. Steel's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; the conditions of Renewable Operating Permit (ROP) number 199600132d; and Consent Order AQD No. 1-2005.

During the visible emissions readings and report review, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
No. 2 BOP Shop Roof Monitor (EG2BOF-VESSELS)	ROP No. 199600132d, Table E-01.18, Section II.2 Rule 336.1364(2) 40 CFR 63.7790(a) and Table 1.12	On May 17, 2016, 40% was the highest 3-minute average opacity calculated (see enclosed VE form). The plume color was brown. 20% opacity on a 3-minute average is the visible emission limit.
No. 2 BOP Shop Roof Monitor (EG2BOF-VESSELS)	ROP No. 199600132d, Table E-01.18, Section II.2 Rule 336.1364(2) 40 CFR 63.7790(a) and Table 1.12	In the March 2016 report, facility reported one exceedance of the 20%, 3-minute opacity limit while performing visible emission readings on March 30, 2016 as observed by an

	Consent Order AQD No. 1-2005, Paragraph 11.A.3(e)	independent certified observer. The 3-minute average opacity observed was 28%.
B2 blast furnace (EGBLAST-FCE-B) (FGBLASTFURNACE S-A,B&D)	<p>ROP No. 199600132d, Table E-01.13, Section V.1</p> <p>ROP No. 199600132d, Table E-01.13, Section V.2</p> <p>ROP No. 199600132d, Table F-01.05, Section VI.5</p> <p>40 CFR Part 63 Subpart FFFFF 63.7790(b)(1)</p> <p>40 CFR Part 63 Subpart FFFFF 63.7800 (b)</p> <p>40 CFR Part 63 Subpart FFFFF 63.7833(b)(1)</p> <p>R336.1910</p>	During the January – December 2015 time period, failure to operate the air pollution control device in a satisfactory manner. Also, failure to operate at or above the required minimum settings for the capture system and control device and in accordance with the MACT Operation and Maintenance (O&M) plan at all times.
No. 2 BOP Shop (FG2BOP-SHOP)	<p>ROP No. 199600132d, Table F-01.07, Section III.A.2.5</p> <p>ROP No. 199600132d, Table F-01.07, Section VI.4</p> <p>40 CFR Part 63 Subpart FFFFF 63.7790(b)(1)</p> <p>40 CFR Part 63 Subpart FFFFF 63.7800 (b)</p> <p>40 CFR Part 63 Subpart FFFFF 63.7833(b)(1)</p> <p>R336.1910</p>	During the July - December 2015 time period, failure to operate the air pollution control device in a satisfactory manner. Also, failure to operate at or above the required minimum settings for the capture system and control device and in accordance with the MACT O&M plan at all times.

In the July – December 2015 semi-annual deviation report, casting on the B2 blast furnace without the use of the baghouse occurred on four separate days for a total of 673 minutes. In the annual deviation report, casting with only two of the required three fans in operation occurred on two separate days for a total of 290 minutes. The permittee is prohibited from operating the B2 blast furnace unless the baghouse is operating properly

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per ROP No. 199600132d, Table E-01.13, Section V.1. Proper operation of the baghouse includes the use of all three fans. These are also failures to operate an air cleaning device in a satisfactory manner per Rule 336.1910. Additionally, ROP No. 199600132d, Table E-01.13, Section V.2, prohibits the permittee from simultaneously shutting down more than one baghouse compartment. As the baghouse was not in use for 673 minutes, all the compartments were shut down.

ROP No. 199600132d, Table F-01.05, Section VI.5, and 40 CFR Part 63, Subpart FFFFF, 63.7790(b)(1) and 63.7833(b)(1), require the permittee to operate each capture system and control device applied to emissions from a blast furnace casthouse or to secondary emissions from a Basic Oxygen Process Furnace at or above the lowest value or settings established for the operating limits in your operation and maintenance plan (O&M). 40 CFR Part 63, Subpart FFFFF, 63.7800(b) requires the permittee to prepare and operate at all times according to a written O&M plan for each capture system or control device subject to an operating limit in 63.7790(b). As all of the baghouse fans were not in operation during casting on the B2 furnace, this indicates a failure to operate the fans at or above the lowest settings established in the O&M plan and/or a failure to follow the O&M plan at all times.

ROP No. 199600132d, Table F-01.07, Section III.A.2.5 and Section VI.4 reference 40 CFR Part 63, Subpart FFFFF, 63.7800(b) and 63.7833 which are summarized above. In the July – December 2015 semi-annual deviation report, the No. 1 baghouse at the No. 2 BOP Shop operated with only one of the two required fans for 59 hours and 27 minutes over a span of three days. Failure to operate the No. 1 baghouse with both of the required fans in operation and failure to operate the No. 1 baghouse at or above the minimum fan amps for the capture system and control device listed in the O&M plan are violations of the cited conditions and a failure to operate an air cleaning device in a satisfactory manner.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by June 17, 2016 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Furthermore, there were no reported deviations from the opacity limits for the B2 blast furnace casthouse roof monitor related to casting without the use of all three baghouse fans. Please include in your response an explanation of how U.S.Steel is certifying compliance with the casthouse roof monitor opacity limit of 20% on a 6 minute average per Rule 336.1358(1) and 40 CFR Part 63 Subpart FFFFF (Table 1.7b.) during casting when the baghouse is not operating properly.

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If U.S. Steel believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violations cited above. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

A handwritten signature in black ink that reads "Katie Koster". The signature is written in a cursive style with a large initial "K".

Katie Koster
Senior Environmental Engineer
Air Quality Division
313-456-4678

Enclosure

cc: Ms. Alexis Piscitelli, U.S. Steel
cc via email: Ms. Lynn Fiedler, DEQ
Ms. Teresa Seidel, DEQ
Ms. Heidi Hollenbach, DEQ
Mr. Thomas Hess, DEQ
Ms. Wilhemina McLemore, DEQ
Mr. Jeff Korniski, DEQ