



June 23, 2016

Ms. Katherine Koster
State of Michigan, Department of Environmental Quality
Air Quality Division, Southeast District
3058 W. Grand Blvd, Suite 2-300
Detroit, MI 48202

SENT VIA ELECTRONIC MAIL AND CERTIFIED MAIL

**SUBJECT: United States Steel Corporation – Great Lakes Works, SRN A7809
No. 2 BOP Shop Roof Monitor; B2 Blast Furnace
Violation Notice dated May 27, 2016**

Dear Ms. Koster,

On June 3, 2016, U. S. Steel – Great Lakes Works (U. S. Steel) received a violation notice (VN) dated May 27, 2016 from the Michigan Department of Environmental Quality (MDEQ) regarding the No. 2 BOP Shop Roof Monitor and the B2 Blast Furnace. The MDEQ requested a response to the VN by June 17, 2016. Per an email correspondence dated June 3, 2016, U. S. Steel requested and received an extension to extend the June 17, 2016 deadline until June 24, 2016.

No. 2 BOP Roof Monitor – May 17, 2016

In the notice, MDEQ alleges that on May 17, 2016, based upon VEOs that it conducted while on-site, U. S. Steel's No. 2 BOP Shop Roof Monitor exceeded the applicable opacity limit of 20% 3-minute average limitation required by MI Rule 336.1364(2); 40 CFR Part 63.7790(a) which refers to Table 1.12. as those conditions are incorporated into ROP No. 199600132d, Table E-01.18, Section II.2. MDEQ alleges that based upon its VEOs, the emissions from 2:51 to 2:54 (3-minute average) on May 17, 2016 exhibited 40% opacity. U. S. Steel notes that during the time of the observation, U. S. Steel incurred problems with the sand seal associated with Vessel 26. U. S. Steel expedited repairs to the sand seal which were completed the same day the observation was made by MDEQ.

No. 2 BOP Roof Monitor – March 30, 2016

MDEQ also alleges that based upon U. S. Steel's submittal of its March 2016 Visible Emission Observation (VEO) Report for the BOP Roof Monitor and ESP Stack, U. S. Steel exceeded the 20% three-minute average on March 30, 2016. MDEQ alleges that the reported visible emissions deviation from that date was a violation of MI Rule 336.1364(2), 40 CFR Part 63.7790(a) which refers to Table 1.12, as those conditions are incorporated into ROP No. 199600132d, Table E-01.18, Section II.2. MDEQ also alleges that the emissions recorded on March 30, 2016 and reported to MDEQ were in violation of Consent Order AQD NO. 1-2005, Paragraph 11.A.3(e).

As previously reported in the April 29, 2016 submittal regarding the March 30, 2016 deviation,



U. S. Steel maintains that the emissions were abnormal because of mechanical failure:

“On March 30, 2016, GLW incurred a 3-minute average opacity reading at the BOP Shop Roof Monitor of 28%. U. S. Steel investigated the incident and discovered the cause of the abnormal emission event was a mechanical failure with the top primary louver on 26 Vessel. The resulting restriction caused intermittent periods of insufficient draft. Permanent repairs were made on April 5, 2016.”

B2 Blast Furnace – Operating and Maintenance Allegations

The May 27, 2016 VN cites the deviation below as a violation. The requested response was provided as an attachment submitted with the deviation report.

Excerpt from page 7 of 8 of MDEQ Form EQP 5737, Renewable Operating Permit Deviation Report, for the period July 1, 2015-December 31, 2015.

1. Group or Source Wide ID B Blast Furnace Cathouse Operations	2. Table/Condition No. E-01.13, V.1, V2	3. Date(s) of Occurrence 10-14-2015 10-19-2015 10-20-2015 10-28-2015	4. Previously reported ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 256 minutes 330 minutes 84 minutes 3 minutes
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Equipment monitoring		7. Description of Deviation Blast furnace cast without the baghouse on 10/14, 10/19, 10/20, and 10/28		
8. Reason for Deviation and Description of Corrective Action Taken See IRONMAKING Attachment 1				

1. Group or Source Wide ID A, B and D Blast Furnaces Flexible Grouping	2. Table/Condition No. F-01.05, VI.5	3. Date(s) of Occurrence 10-14-2015 10-19-2015 10-20-2015 10-28-2015	4. Previously reported ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 256 minutes 330 minutes 84 minutes 3 minutes
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Equipment monitoring		7. Description of Deviation Blast furnace cast without the baghouse on 10/14, 10/19, 10/20, and 10/28		
8. Reason for Deviation and Description of Corrective Action Taken See IRONMAKING Attachment 1				

Excerpt from Attachment 1 included by U.S. Steel to provide further explanation regarding the deviations.

October 14, 2015



E-01.13, V.1 (B Blast Furnace Casthouse Operations)

E-01.13, V.2 (B Blast Furnace Casthouse Operations)

Cast 256 minutes without the B-2 Baghouse due to a PLC fault.

Corrective Action

A program change was made to the PLC, a thirty second delay was added to one of the "module off-line" faults. The PLC was picking up some cleaning cycle changes incorrectly and switching the baghouse out of Automatic mode causing the fans to idle. This change was implemented on October 28, 2015

October 19, 2015

E-01.13, V.1 (B Blast Furnace Casthouse Operations)

E-01.13, V.2 (B Blast Furnace Casthouse Operations)

Cast 330 minutes without the B-2 Baghouse due to a PLC fault.

Corrective Action

A program change was made to the PLC, a thirty second delay was added to one of the "module off-line" faults. The PLC was picking up some cleaning cycle changes incorrectly and switching the baghouse out of Automatic mode causing the fans to idle. This change was implemented on October 28, 2015

October 20, 2015

E-01.13, V.1 (B Blast Furnace Casthouse Operations)

E-01.13, V.2 (B Blast Furnace Casthouse Operations)

Cast 84 minutes without the B-2 Baghouse due to a PLC fault.

Corrective Action

A program change was made to the PLC, a thirty second delay was added to one of the "module off-line" faults. The PLC was picking up some cleaning cycle changes incorrectly and switching the baghouse out of Automatic mode causing the fans to idle. This change was implemented on October 28, 2015

October 28, 2015

E-01.13, V.1 (B Blast Furnace Casthouse Operations)



E-01.13, V.2 (B Blast Furnace Casthouse Operations)

Cast 3 minutes without the B-2 Baghouse due to a PLC fault.

Corrective Action

A program change was made to the PLC, a thirty second delay was added to one of the "module off-line" faults. The PLC was picking up some cleaning cycle changes incorrectly and switching the baghouse out of Automatic mode causing the fans to idle. This change was implemented on October 28, 2015

In the May 27, 2016 VN, MDEQ states that there were no reported deviations for the opacity limits for the B2 blast furnace casthouse roof monitor related to casting without the use of all three baghouse fans. MDEQ has requested that U. S. Steel explain its determination of certifying compliance with the applicable opacity limits from the casthouse roof monitor without the use of all three baghouse fans. In response, U. S. Steel notes that we have previously conducted both certified and non-certified observations when casting without a baghouse. Based on our visible emission observations under similar conditions (including casting when the baghouse was not in operation), U. S. Steel is able to certify compliance with the applicable opacity standard.

No. 2 BOP Roof Monitor – Operating and Maintenance Allegations

In the VN, MDEQ also alleges violations that were reported as deviations in U. S. Steel's Title V Semi-Annual Deviation Report for the reporting period July 1, 2015 to December 31, 2015. The May 27, 2016 VN cites the deviation below as a violation. The requested response was provided as an attachment submitted with the deviation report.

Excerpt from page 3 of 8 of MDEQ Form EQP 5737, Renewable Operating Permit Deviation Report, for the period July 1, 2015-December 31, 2015.

1. Group or Source Wide ID No. 2 Basic Oxygen Process Shop	2. Table/Condition No. 40 CFR Part 63 Subpart FFFFF 63.7833(b)(1)	3. Date(s) of Occurrence 7-29-2015 thru 7-31-2015	4. Previously reported ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Date	5. Duration of Deviation 59 hours 27 minutes
6. Method Used to Determine Compliance Status (if different from method specified in RO Permit) Process Monitoring		7. Description of Deviation BOP No. 1 Baghouse operated on only 1 baghouse fan.		
8. Reason for Deviation and Description of Corrective Action Taken See BOP Attachment 1				

Excerpt from Attachment 1 included by U.S. Steel to provide further explanation regarding the deviations.

July 29, 2015



40 CFR Part 63 Subpart FFFFF 63.7833(b)(1)

Incident Cause

No. 1 Baghouse Motor for the No. 1 Fan failed. This caused the fan amps to drop below the minimum of 115 Fan amps for Fan #1

Corrective Action

During the time of the incident, the ESP was run in conjunction with #1 Baghouse to increase capture. Non-certified visible emission was conducted and was normal. The baghouse motor was replaced on July 31.

If you have any questions regarding this matter or require additional information, please contact Alexis Piscitelli at 313-749-3900 or apiscitelli@uss.com.

I certify that based off information and belief formed after reasonable inquiry, the information provided in this response is true and correct to the best of my knowledge and information.

Sincerely,

A handwritten signature in black ink, appearing to be "James Gray", written over a circular scribble.

James Gray
General Manager
U. S. Steel – Great Lakes Works

A handwritten signature in black ink, appearing to be "Alexis Piscitelli", written in a cursive style.

Alexis Piscitelli
Director, Environmental Control
U. S. Steel – Great Lakes Works

cc: Dave Hacker (U. S. Steel)