Great Lakes Works
Environmental Dept.
No. 1 Quality Drive
Ecorse, Michigan 48229

May 11, 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
D4 Blast Furnace Casthouse Roof Monitor; B2 Blast Furnace
Violation Notice dated April 20, 2016

Dear Ms. Koster,

On or about April 26, 2016, U. S. Steel – Great Lakes Works (U. S. Steel) received a violation notice (VN) dated April 20, 2016 from the Michigan Department of Environmental Quality (MDEQ) regarding the D4 Blast Furnace Casthouse Roof Monitor and the B2 Blast Furnace.

In the notice, MDEQ alleges the U. S. Steel D4 Blast Furnace Casthouse Roof Monitor exceeded the applicable opacity limit of 20% 6-minute average limitation required by ROP No. 199600132d, Table E-01.14, Section II.B. MDEQ alleges that the U.S. Steel B2 Blast Furnace bell seals were malfunctioning required by ROP No. 199600132d, Table F-01.05, Section VI.5. The MDEQ also alleges such emission were in violation of MI Rule 336.1358(1); 40 CFR Part 63 Subpart FFFFF, Table 1.7 and 40 CFR 63.6(e)(1).

On April 4, 2016, MDEQ alleges the U. S. Steel D4 Blast Furnace Casthouse Roof Monitor exceeded the applicable opacity limitation when MDEQ staff observed a 58% 6 minute opacity. As previously reported to you via email dated April 12, on Monday April 4th, 2016, United States Steel Great Lakes Works D4 Blast Furnace was in recovery state from a process malfunction. In order to prevent severe property damage, the taphole was intentionally left open for a period longer than usual in order to ensure the furnace was dry. The baghouse was operating properly at the time of the observation. Additionally USS was using natural gas lances at the casthouse to minimize emissions. Procedures were being followed to recover the Blast Furnace. Earlier on April 4, between 9:05-10:30 am, a certified reading of the D4 Blast Furnace Casthouse Roof Monitor was conducted and found to be in compliance.

MDEQ alleges the bell seals were malfunctioning on April 4, 5, and 8, and U. S. Steel failed to actively mitigate emissions in accordance with good air pollution practices. U. S. Steel respectfully disagrees with the MDEQ's assertions. In addition, despite our requests, the MDEQ has not provided U. S. Steel with copies of the visible emissions readings from April 4, 2016. Because we have no information indicating that a violation occurred, we cannot agree with the MDEQ's allegations.

We also disagree with the MDEQ's *new* interpretation of 40 CFR Part 63.6(e)(1) and ROP No. 199600132d, Table F-01.05, Section V1.5.

First, the regulation and ROP citation do not prohibit any emissions from a blast furnace top. ***In fact, the cited regulation and ROP citation do not apply to blast furnace tops.*** This interpretation of the regulation and ROP condition is inconsistent with the MDEQ's prior regulatory applicability determinations where it has stated that the emissions standard that applies to blast furnace tops is the opacity standard in Rule 336.1301 which provides that the limit is a A 6-minute average of 20% opacity, except for 1 6-minute average per hour of not more than 27% opacity. This rule is incorporated into General Condition No. 2 of ROP No. 199600132d. This is also the standard that the MDEQ has cited when issuing violation notices to a neighboring steel company regarding its blast furnace tops.

Second, the MDEQ alleges that a blast furnace top leak is "malfunction" under the MACT. This is not true. A leaking bell top is not a "malfunction" under the MACT because there is no standard under the MACT that applies to bell tops. EPA defines a malfunction in 40 CFR 63.2 as:

> any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner ***which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded.*** Failures that are caused in part by poor maintenance or careless operation are not malfunctions.(emphasis added).

However, the MACT does not apply any standard to the blast furnace top. Thus, the MDEQ's interpretation is not supported by its own prior determinations and EPA rules. Emissions from blast furnace tops are not malfunctions as defined in 40 CFR 63.2 because there are no "applicable standards" for tops in the Iron and Steel MACT (Subpart FFFFF). There is no opacity or other standard codified in the Iron and Steel MACT that applies to furnace tops. The MDEQ has not referenced an opacity standard in the Iron and Steel MACT (Subpart FFFFF) because none exists. Even if it were "zero", such opacity standard would be codified in Subpart FFFF as is the case with other MACT regulations that specify "no visible emissions." For Subpart FFFFF, this is not the case. See, e.g., 40 CFR 63.7800(a) which provides, *"[a]s required by §63.6(e)(1)(i)* [emphasis added], you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions *at least to the levels required by this subpart* [emphasis added.]

In addition, USEPA and MDEQ are quite aware that furnace tops may have emissions from time to time – and therefore, such emissions are not "malfunctions" as defined in 40 CFR 63.2. As noted above, this does not mean that there are no standards in place that apply to furnace tops. Indeed, furnace tops are subject to the applicable state opacity standards as MDEQ has previously cited the neighboring steel company on this basis.

Third, even if 63.6(e)(1) did apply to tops, which it does not, MDEQ incorrectly states that 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." To the contrary, prior to being notified by MDEQ, U.S. Steel conducted an internal review to determine potential causes of emissions from the bell. The Bell Rod bushing was found to be worn causing an alignment issue with the large bell. Replacement parts were fabricated and the new bushing was installed on April 19, 2016, improving alignment of the Large Bell allowing it to seat more evenly with the Large Bell Hopper. During the next outage, currently scheduled for May 24, 2016, U. S. Steel will be going into the Bell Chamber to verify position and ensure the large bell is seating properly.

MDEQ alleges that black particulate was exiting the D4 stove stack intermittently between approximately 2:30-3:15 pm. U. S. Steel has not received a copy of the AQD visible emission reading(s) on April 4, 2016.

As previously reported to you via email dated April 12, on Monday April 4th, 2016, #3 Stove combustion air fan inlet screens collapsed, causing combustion air flow to surge, which led to improper combustion of fuels in #3 stove. The debris was removed and normal operation resumed.

MDEQ is requesting, U. S. Steel develop and provide malfunction abatement Plans (MAP) for both B2 and D4 blast furnace stoves. As previously requested by Alexis Piscitelli via email dated April 27, U. S. Steel is requesting additional time to develop malfunction abatement plans as requested by MDEQ. U. S. Steel will be able to submit the MAPs to MDEQ on or before July 31, 2016.

U. S. Steel has enclosed, with this letter, copies of all non-certified and certified visible emissions observations taken between January and April 2016 for any of the operations on Zug Island.

We would be pleased to address any questions or concerns the MDEQ may have. 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,

Jon Olszewski
Plant Manager, Primary
U. S. Steel – Great Lakes Works

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

cc: Dave Hacker (U. S. Steel)