

**Great Lakes Works**

Environmental Dept.
No. 1 Quality Drive
Ecorse, Michigan 48229

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DEC 27 2018

Air Quality Division
Detroit Office

December 19, 2018

Ms. Katherine Koster
State of Michigan, Department of Environmental Quality
Air Quality Division, Detroit Office
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 Slag Pits & Backdraft Stack
Violation Notice dated November 21, 2018**

Dear Ms. Koster:

On or about November 27, 2018, U. S. Steel – Great Lakes Works (U. S. Steel) received a violation notice (VN) dated November 21, 2018 from the Michigan Department of Environmental Quality (MDEQ) regarding visible emissions observed by MDEQ staff on July 26, 2018 and July 30, 2018 from the D4 Blast Furnace Slag Pits and the D4 Blast Furnace Backdraft Stack respectively. In the notice, MDEQ alleges U. S. Steel exceeded the visible emission limitations required by ROP No. 199600132d, Table B-1, Source-Wide Requirements, Section II.B and Act 451 Section 324.5524(2) on July 26, 2018 and exceeded the visible emission limitations required by ROP No. 199600132d, A-1, General Condition 2.a and MI Rule 336.1301(1)(a) on July 30, 2018. U. S. Steel requested and was granted an extension on November 29, 2018 for the response until December 19, 2018.

On July 26, 2018, MDEQ personnel were onsite at U. S. Steel conducting a routine compliance audit. During this time, Levy was in the process of removing slag from the south slag pit located at D4 Blast Furnace and excess emissions were observed by MDEQ staff during the loading of slag into Levy trucks. Upon further investigation, it was found that the water sprays at the west end of the D4 Slag Pits had become inoperable which lead to the excess emissions during the loading of slag. To prevent a reoccurrence of this, U. S. Steel replaced all the slag pit sprays for the D4 Slag Pits, including those located at the west end of the pits, during the recent outage and met with Levy regarding the proper slag pit digging procedures.

As a side note, U. S. Steel respectfully disagrees with the MDEQ's new interpretation that a slag pit should be considered a storage pile. MDEQ has previously cited ROP No. 199600132d, A-1, General Condition 2.a and Rule 336.1301(1)(a) as the applicable requirements for visible emissions from slag pits. Specifically, in the Violation Notice U. S. Steel received from the MDEQ on July 19, 2007. Slag Pits are a vital *process* related to the production of iron and have a direct impact upon the operation of blast furnaces. In the Great Lake Works Title V Permit, slag pits are defined as their own unique source in multiple locations, (Tables E-01.12, E-01.13, E-01.14, and Table F-01.06). This distinguishes them separately from storage piles and is more in line with the

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notion that a slag pit is its own process, and not simply material storage. Thus, the General Condition 2.a and MI Rule 336.1301(1)(a) would apply to the slag pits, which requires the opacity from slag pits not to exceed 20% (except for one 6-minute average per hour of not more than 27%).

The department also alleges that U. S. Steel violated ROP No. 199600132d, A-1, General Condition 2.a and MI Rule 336.1301(1)(a) on July 30, 2018 when MDEQ personnel were again onsite to complete the compliance inspection and observed emissions from the D4 Blast Furnace backdraft stack. The D4 Blast Furnace had to be shut down at approximately 9:30 am on July 30, 2018 to prepare the furnace for the upcoming extended outage that started on August 2, 2018. During this shut down, the furnace utilized the backdraft stack to backdraft through the furnace, isolating the stoves so work could be performed on one of the blowers. During the shutdown, it is believed that there was a lack of air (oxygen) to complete combustion of the gases exhausting out the backdraft stack. Therefore, during the August outage, an air aspirating valve was added to the stack which will help introduce more air into the backdraft stack allowing for better combustion of the gases thus, reducing PM emissions.

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 me at 313-749-3900.

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,



Alexis Piscitelli

Director, Environmental Control

U. S. Steel – Great Lakes Works

cc: Dave Hacker (USS)

Jenine Camilleri (MDEQ)