



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



October 26, 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

Ms. Jenine Camilleri
Enforcement Unit Supervisor
State of Michigan, Department of Environmental Quality
Air Quality Division
P.O. Box 30260
Lansing, MI 48909-7760

SENT VIA ELECTRONIC MAIL AND CERTIFIED MAIL

**SUBJECT: United States Steel Corporation – Great Lakes Works
No. 5 Pickle Line Fume Scrubber
Violation Notice dated October 5, 2018**

Dear Ms. Koster:

On or about October 9, 2018, U. S. Steel – Great Lakes Works (U. S. Steel) received a violation notice (VN) dated October 5, 2018 from the Michigan Department of Environmental Quality (MDEQ) regarding the No. 5 Pickle Line Fume Scrubber. In the notice, MDEQ alleges U. S. Steel exceeded the Hydrochloric Acid emission limitations required by ROP No. 199600132d, Table E-01.08, Section II.B. The Department also alleges such emissions were in violation of MI Rule 336.1225 and 40 CFR Part 63, Subpart CCC §63.1157(a)(1) and (2).

U. S. Steel provided the following information on June 26, 2018 along with submittal of the test results for the April 27, 2018 test. Upon receiving the test results from BT Environmental Consultants U. S. Steel immediately began an investigation beginning with an inspection of the scrubber. Based upon the inspection U. S. Steel determined several possible reasons for the excursion and promptly implemented corrective actions. In addition to the corrective actions, several other precautionary measures were taken to improve scrubber performance. The corrective actions and precautionary measures were completed in an iterative fashion, beginning in mid-May when we received the information and investigated. While the repairs began in May, we completed the iterative improvement process in early June. The following is a list of actions completed:

Corrective Actions:

1. We installed a full surface area fiberglass grating which was tied together to hold down the packing more effectively to prevent any potential short-circuiting which was found to be the case during the inspection.

2. The drain size on the scrubber was increased which we anticipate will help scrubber performance at higher water flow rates as it will increase the efficiency of spray water flow exiting the scrubber and in-turn should reduce water residence time within the scrubber.

Precautionary Measures:

1. The packing media was replaced and the inside of the scrubber tower was cleaned as a precautionary measure.
2. The internal spray bar was raised up and away from the packing to allow for a more uniform spray across the scrubber packing.

U. S. Steel then scheduled and completed a compliance demonstration for the No. 5 Pickle Line Fume Scrubber on September 27, 2018 and the results of the test showed the scrubber in compliance with all applicable requirements. The test report has been included at the end of this correspondence.

Regarding the pickle tank replacement from 2015, the replacements would be classified as routine maintenance, parts replacement, or other repairs that do not appreciably change the quality, nature, quantity, or impact of air contaminant emissions making them exempt from permitting per R 336.1285(2)(a). Additionally, the capital cost for the pickle line upgrade is substantially less than 50% of the cost for a new continuous pickle line from the requirements of a "reconstructed affected continuous pickle line" in 40 CFR Part 63 Subpart CCC and 40 CFR Part 63 Subpart A.

In late 2015, U. S. Steel replaced four tanks and lids which are part of the continuous pickling line, with three tanks and lids; and repaired the fume capture system ductwork. The tank replacement resulted in an overall reduction in the working surface area of acid for the system with no change in average acid concentration across the tanks resulting in an overall reduction in acid fumes generated. As such the 2015 No. 5 Pickle Line tank replacements did not require a PTI, nor did it meet the criteria of a "reconstructed affected continuous pickle line" under 40 CFR Part 63 Subpart CCC and 40 CFR Part 63 Subpart A.

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.

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,



Bruce Black
Plant Manager – Ironmaking & Rolling
U. S. Steel – Great Lakes Works



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