IN0000337
Porter Co

United States Steel Corporation – Gary Works
One North Broadway, MS 70-A
GARY, IN 46402

VIA CERTIFIED MAIL 7017 0660 0000 8308 3919

October 31, 2017

David Greinke
Office of Water Quality
Indiana Department of Environmental Management
100 North Senate Avenue – Post Office Box 6015
Indianapolis, IN 46206

Subject: United States Steel Corporation Gary Works – Midwest Plant
NPDES Permit IN0000337
Total Chromium Exceedance Outfall 304

Dear Mr. Greinke

This letter is the written five-day submission regarding a total chromium exceedance at the U. S. Steel Corporation Gary Works – Midwest Plant ("Midwest") Outfall 304 (NPDES Permit IN0000337 effective April 1, 2016). The total chrome loading for the 24-hour period from 7:00 am October 25, 2017 through 7:00 am October 26, 2017 at Outfall 304 was 56.7 lbs/day as compared to the Permit limit of 30.0 lbs./day. Outfall 304 is an administrative outfall that is the sum of the reported mass of both internal Outfalls 104 and 204. The reported mass during this period was 0.06 lbs/day and 56.7 lbs/day, at Outfalls 104 and 204, respectively. The sample collected at Outfall 204 was retested and the results verified. IDEM was notified at 11:26 am on October 27, 2017 via telephone.

At 7:43 am on October 26th, 2017, USS management was notified by the technician who was collecting samples that the daily 24-hour composite sample for Outfall 204 was discolored. Upon visual confirmation by USS management of the discoloration, U. S. Steel immediately began the process of shutting down "A" train of the chrome treatment plant, and bringing the parallel "B" train online. "B" train not running at the time the discoloration was identified. At roughly 8:10 am "B" train was in operation and "A" train was no longer discharging. As "A" train was the source of the discoloration, when "B" train was brought online the discoloration of the effluent ceased. Investigation revealed that flow through the "A" train lamella clarifier was not uniform across the lamella due to heavier solids buildup on one side of the lamella, and as a result there was excessive solids carryover. The sludge in the lamella was pumped out to restore uniformity to the flow through the lamella. Upon removing the sludge build-up in the "A" train lamella clarifier, "A" train was put into recirculation mode. During recirculation mode the discharge of "A" train is recirculated back to the influent of the chrome treatment plant in order to verify uniform flow through "A" train's lamella clarifier. This ensured that excessive solids carryover was no longer occurring, and that "A" train was ready to be put back into service when needed.

Midwest continues to evaluate future actions as a result of this incident and has so far determined these steps to help prevent reoccurrence:

1. Re-train operators
2. Enhance turbidity monitoring configuration to more accurately reflect lamella clarifier performance.

U. S. Steel requests that this submittal be afforded confidential treatment under all applicable statutes.

If you have any questions about this matter, please call me at (219) 888-4500 or email me at JEHanning@uss.com.

Sincerely,

Joseph E. Hanning

Joseph E. Hanning, PE
Environmental Control
United States Steel Corporation
Gary Works, Midwest Plant, East Chicago Tin