

**AK Steel Corporation**  
4001 Miller Road  
Dearborn, MI 48121-1699

TELEPHONE (313) 845-3217

**James E. Earl**  
Environmental Affairs Manager  
Dearborn Works

January 24, 2020

Ms. Katherine Koster  
Senior Environmental Engineer  
Air Quality Division  
Detroit District Office  
Cadillac Place, Suite 2-300  
3058 West Grand Blvd  
Detroit, MI 48202



Subject: Response of Second Violation Notice dated January 13, 2020  
AK Steel Dearborn Facility  
4001 Miller Road  
Dearborn, Michigan 48120-1699  
SRN: A8640, Wayne County

Dear Ms. Koster:

I am writing on behalf of AK Steel Corporation in response to the Second Violation Notice dated January 13, 2020. The Second Violation Notice deemed AK Steel's written response to the November 25, 2019 Violation Notice to be inadequate because AK Steel did not provide the dates the violation occurred, an explanation of the causes and duration of the violation, whether the violation is ongoing, a summary of the actions that have been taken and are proposed to be taken to correct the violation, the dates by which these actions will take place, and specific steps being taken to prevent a reoccurrence.

AK Steel disagrees that its response was inadequate. The original Violation Notice specifically notes that if AK Steel believes the statements in the Violation Notice are inaccurate or do not constitute violations of the applicable legal requirements, then the company is to provide appropriate factual information to explain its position. That is exactly what AK Steel did in its December 16, 2019 response. In addition, it is not reasonable to provide the other information requested by the Violation Notice related to the alleged violation, when AK Steel does not believe there was in fact a violation.

While AK Steel disagrees that the facts identified by EGLE constitute a violation of ROP General Condition 12(b) and R. 336.1901(b) for the reasons discussed in the company's December 16<sup>th</sup> response, we are nonetheless providing the information requested by EGLE relating to the alleged incident.

***The dates the violation occurred.***

The fugitive dust incident occurred between the early evening of October 19 and the afternoon of October 20.

***An explanation of the causes and duration of the violation.***

AK Steel is uncertain as to what caused the fugitive dust incident. It is true that the C-Blast Furnace was starting up from a 19-day maintenance outage over the October 19-20 timeframe. The startup did involve a period of beaching at the blast furnace slag pits and at the BOF teeming aisle on October 20. The beaching times, location, and amount beached through the afternoon of October 20 are as follows:

5:00 AM – 6:00 AM – 270 tons at Blast Furnace Slag Pit  
9:00 AM – 10:15 AM – 420 tons at Blast Furnace Slag Pit  
10:30 AM – 11:45 AM – 137 tons at BOF Teeming Aisle  
12:00 PM – 12:45 PM – 360 tons at Blast Furnace Slag Pit  
5:00 PM – 5:30 PM – 191 tons at BOF Roof Monitor

Method 9 readings were conducted for all beaching events between 9:00 AM and 5:30 PM. During this time frame, all observations at the Blast Furnace Slag Pit were in compliance with the applicable emissions limit of 20% opacity, 3-minute average. An exceedance did occur while beaching at the teeming aisle of the BOF from 11:37 to 11:40 AM. This exceedance was caused by the formation of a skin on the top of the iron. This prevented the iron from exiting the pot when the pot was tilted. When the pot was tilted past a certain point, the iron broke through the skin and dumped onto the ground all at once.

Additional fugitive emissions were observed while digging the iron from both the blast furnace slag pits and the BOF teeming aisle after the completion of the beaching event. Iron beached within the BOF teeming aisle occurred inside the BOF building which provided some additional control for the activity. Observations were conducted on the BOF roof monitor while digging and the digging was paused when emissions from the roof monitor were observed. Observations were not conducted while digging the Blast Furnace Slag Pits.

***Whether the violation is ongoing.***

The alleged violation is not ongoing.

***A summary of the actions that have been taken and are proposed to be taken to correct the violation and the dates by which these actions will take place.***

As noted above, the alleged violation is not ongoing, thus it has already been “corrected.”

***Specific steps being taken to prevent a reoccurrence.***

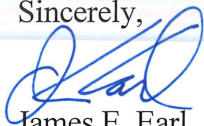
Several meetings with Blast Furnace, BOF, and Edw. C. Levy Co. personnel were conducted in the months leading up to the outage to cover the safety and environmental concerns related to beaching. The outcome of the meetings resulted in several precautions taking place during the beaching events at the BOF as this was where the majority of exceedances have occurred in the past.

This included the use of dust bosses and the digging out of pits as slow as possible to reduce the amount of emissions generated. AK Steel is in the process of reviewing its beaching procedures at the BOF to incorporate lessons learned during the event, particularly in regard to the exceedance that occurred. The corrective actions are focused on providing a quicker transfer of the beaching pot to minimize the risk of a skin forming on the iron prior to beaching.

These precautions were not taken at the Blast Furnace Slag Pit as data from numerous Method 9 readings was available that indicated that emissions were minimal when dumping slag and digging the slag pits under normal conditions. It was believed that this data was relevant as the vast majority of the material beached, especially at the earlier stages of the startup, was believed to be slag. The observations while beaching at the slag pit seemed to confirm this assumption. However, AK Steel plans to re-evaluate how beaching is performed at the Blast Furnace Slag Pit under circumstances where the Blast Furnace is being restarted from an extended outage to provide for better theoretical emissions control. This re-evaluation will certainly be conducted prior to the next startup of this type. However, it must be emphasized that this type of startup is in no way indicative of normal startups or of normal operation in general and is an exceedingly rare event.

If you have any questions regarding the provided information or require additional information, please contact me at 313-845-3217.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Earl", is written over the printed name.

James E. Earl  
Environmental Affairs Manager  
AK Steel Dearborn Works