B1661-RVN_20161231 already in MACES

PIONEER FOUNDRY CO., INC.

606 WATER STREET ▪ JACKSON, MICHIGAN 49203

December 31, 2016

Mr. Mike Kovalchick
Air Quality Division
Jackson District Office
301 East Louis Glick Highway
Jackson, Michigan 49201-1556

Transmitted via email - hard-copy to follow.

EMAILED 12/31/16 - BC

Re: Response to Notice of Violation received December 13, 2016

Dear Mike,

This correspondence is in response to your Notice of Violation (NOV) dated December 8, 2016 which was received in our office on December 13, 2016. This NOV addressed three items that were observed during your inspection that occurred on November 22 and 23, 2016:

1. According to your observations during the inspection, you determined that a meaningful change in emissions occurred from our melting process based on a comparison of the 2011 Safety Data Sheet (SDS) for the current ferro silicon inoculant used during the pouring of molten metal into the ladles against the 1997 Material Safety Data Sheet (MSDS) for the ferro silicon inoculant listed in the application for Permit 207-98 for the induction furnaces. As stated in the NOV, "an inoculant containing some chromium and other metals is being used".
2. The semiannual Compliance Reports for 2015 and 2016 for Iron and Steel Foundry Area Sources required under 40 CFR Part 63.10899 (c) for NESHAP Subpart ZZZZZ were not submitted.
3. A program of compliance including a permit to install (PTI) was requested for an e-coat line.

In regards to Item #1 related to the inoculant, the permit application reported the use of a ferro silicon inoculant as part of the melting process. We are currently continuing to use a ferro silicon inoculant, although it is from a different supplier. We do not believe that this supplier change represents a "meaningful change" in the emissions of air contaminants from our facility. The type of inoculant used has not changed, and in fact, the amount of inoculant used now (16 pounds per ladle = 80 pounds per day) is much less than the reported 150 pounds per day specified in the permit application. We believe the perceived difference in the inoculant is due to the fact that the Material Safety Data Sheet (MSDS) for the ferro silicon inoculant listed in the permit application submitted in 1998 was composed in 1997 under the requirements for MSDS's at that time. The regulations in 1997 required that hazardous chemicals used in the workplace must be listed but there was no specific attention given to metal alloys or

potential trace contaminants. There was no breakdown or acknowledgement of the potential metal constituents in the aluminum and iron reported in the MSDS. There could have been many trace metals in the aluminum alloy used or in the grade of iron used in that inoculant. The Safety Data Sheet (SDS) for the ferro silicon inoculant we are currently using breaks down the contents of the product to a much lower level. The current revision (No.6 -dated 02/11/2011) was prepared under the updated requirements for SDSs and other reporting requirements required for other countries (i.e. the Global Harmonized System (GHS). Due to the global marketplace, updated regulations, reporting guidance and increasing liability concerns, much more information is being reported now, including potential trace contaminants in alloys and mixtures than in 1997. The current SDS lists various metals which may be in the inoculant or in a metal alloy in the inoculant. An example of the now very conservative reporting of metals includes chromium that was cited in the NOV. It is listed at a concentration of < 0.5 % by weight. Based on the regulations in place and the regulatory climate in 1997, we believe trace amounts of chromium and the other metals may have been present in the iron or the aluminum but would not have been reported in a MSDS prepared in 1997.

We also would like to better understand the basis for your determination that a reported metal in an SDS for an inoculant that is added to molten metal to react with the metal constituents present and change the metal chemistry and metal casting characteristics would be considered to be emitted at levels that would represent a demonstrated meaningful change in the emissions of air contaminants. We do not believe that inoculants or other products used in metal castings processes and often added to be incorporated into the metal are necessarily present in emissions from these processes at the same ratios to the amounts listed in an SDS, like components of a solvent mixture evaporating from a coating line. There are metal chemistry complexities including a variety of melting and volatilization temperatures for various metal compounds, capture of metallic components not incorporated into metal castings being potentially captured in dross or slag, and other unique circumstances with metal processes that make generalized assumptions of metal concentrations in emissions difficult.

In regards to Item #2, the semi-annual reports for 2015 and 2016 have been completed and express mailed to your office and USEPA Region V with an expected delivery date of December 30, 2016 in both offices. We have already completing melting for the year so the semiannual compliance report for July 1 – December 31, 2016 that was due by January 30, 2017 was able to be completed and submitted early with the other three reports. Failure to submit these reports to document compliance with the MACT Subpart ZZZZZ requirements was an oversight on our part. We have continued to operate in compliance during this time period. Except for minor fluctuations in our annual melt rate tabulation, there have been no changes to our staff, our processes, our scrap feedstock (clean laser cut scrap, no motor vehicle scrap) or binder systems (no methanol) and therefore no changes to our ongoing compliance status have occurred. These reports are similar to what was reported in previous reports submitted since they were initially required under the NESHAPs rule promulgated in 2008. To correct this oversight and prevent this from occurring in the future, we have instituted a "reminder" process and put the report due dates on our calendar.

Item #3 indicates that we should submit a permit application for our e-coat line as part of our compliance program. We do not have an e-coat line at our foundry and need further clarification on what was considered in generating this requirement.

We are a small foundry with 12 employees. We only operate our furnaces periodically, approximately 3 mornings a week and although we indicated our melt rate in our permit application would be 4900 tons, we have melted less than 1000 tons for the past two years, under 20% of that amount. Our current melt rate at less than 1000 tons puts us well under the 20,000 ton per year melt rate for classification as a small area source foundry under the Subpart ZZZZZ regulations.

Should you have any questions or comments on the information presented above, please feel free to contact me at 800-922-7220 or at bob@pioneerfoundry.com.

Sincerely yours,

Robert Lefere
President
Pioneer Foundry