

APR 26 2013

Susan Hedman  
Regional Administrator  
Attn.: R-I9J  
U.S. EPA, Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604

**Re: Ohio EPA comments regarding West Virginia's response to US EPA's proposal on the intended air quality designations for the sulfur dioxide (SO<sub>2</sub>) national ambient air quality standard (NAAQS)**

Dear Administrator Hedman:

Ohio EPA is committed to working with neighboring states to ensure attainment of all NAAQS. Ohio is, and will continue, working closely with West Virginia to prepare attainment plans for the significant SO<sub>2</sub> sources in the forthcoming nonattainment areas along the Ohio River. Ohio EPA has reviewed West Virginia's April 5, 2013 letter to Mr. Shawn M. Garvin ("RE: West Virginia Area Designations Under the June 2010 Sulfur Dioxide NAAQS – Response to EPA's February 6, 2014 Preliminary Intentions (120 Day Letter)") and has additional comments we wish to be submitted as part of the record.

Ohio EPA firmly believes that the correct designations for Mead Township in Belmont County and Ohio Township in Monroe County are unclassifiable designations.

West Virginia has requested that Ohio Township in Monroe County, Ohio also be designated nonattainment. West Virginia believes, based on the five factor analysis, that Ormet Primary Aluminum may be impacting the Marshall County violating monitor. Ormet reported 2,442 tpy of SO<sub>2</sub> emissions in 2008 and 2,471 tpy in 2011. These emissions represented 3.5% and 6.7% of the area's emissions, respectively. U.S. EPA Region 5 concluded in the Technical Support Document, "Ohio Area Designations For the 2010 SO<sub>2</sub> Primary National Ambient Air Quality Standard" that:

"There is one source in Monroe County, Ohio, which emits about 2400 tons per year and is located over 30 kilometers from the Marshall County monitor. It is also judged not to be a nearby source contributing to the monitored violation.

Table 9 includes sources in Marshall County, West Virginia, which are included in the West Virginia portion of the Wheeling WV-OH Interstate Area.”

In addition, although U.S. EPA Region 3 stated in the Technical Support Document, “West Virginia Area Designations For the 2010 SO<sub>2</sub> Primary National Ambient Air Quality Standard” that Ormet was identified for further review based on the Q/d screening level analysis (as noted by West Virginia in their April 5, 2013 letter); Region 3 ultimately concluded this township, and facility, did not warrant inclusion in the nonattainment area:

“Meteorological data suggests that emissions from large sources southwest/west of the monitor (located in both Marshall County, WV and Belmont County, OH) likely impact the monitor and contribute to SO<sub>2</sub> NAAQS violations in Marshall County. Available emissions data further suggests that the large sources most likely contributing to nonattainment in Marshall County are those nearest (for example, the R.E. Burger Plant) the violating monitor in Marshall County. Based on the consideration of all the relevant and available information, as described above, EPA believes that the boundaries described herein encompass the appropriate initial nonattainment area indicated by the violating monitor in Marshall County.”

Ohio EPA agrees that other large sources in the area, which are much closer and emit significantly greater amounts of SO<sub>2</sub>, are the significant contributors to the violating monitor. Ohio strongly recommends Ohio township remain unclassifiable with respect to the 2008 SO<sub>2</sub> standard.

With respect to Mead Township, Ohio EPA reiterates our March 13, 2013 letter to you (“RE: Comments on USEPA’s proposal on the intended air quality designations in Ohio for the revised National Ambient Air Quality Standards (NAAQS) for Sulfur Dioxide (SO<sub>2</sub>)”):

“As recognized in both the West Virginia and Ohio technical support documents (TSD) supplied by US EPA, the only source in Ohio that may have been a significant source is the R.E. Burger power plant. As indicated in Table 9 of Ohio’s TSD, R.E. Burger represented just over 15,000 tons of SO<sub>2</sub> emissions out of over 66,700 tons in the area in 2008. At that time the monitor located in Ohio was at 105 ppb while the monitor in West Virginia was at 113 ppb. Since that time, emissions have decreased at the R.E. Burger plant to include zero emissions in 2011 and 2012. This is a result of the permanent shut down of two larger units (156 MW each) and the cold storage of two smaller units (94 MW each). Since the shutdown and cold storage, the Ohio monitor has shown attainment while the West Virginia monitor has continued to show nonattainment.”

Ohio EPA does not believe the five factor analysis done by West Virginia Department of Environmental Protection provides sufficient evidence to demonstrate that the violating monitor in West Virginia will not reach attainment without taking credit for emission reductions (from Burger) in Ohio. The R. E. Burger power plant is the only significant

SO2 source in this area that lies within Ohio and accounted for less than one quarter of the area's emissions in 2008. Burger reported zero emissions in 2011 and 2012 due to the permanent shut down of two larger units (156 MW each) and the cold storage of two smaller units (96 MW each). Currently, there are no plans to bring the smaller units out of cold storage. Even with the shutdown and cold storage at Burger, the West Virginia Marshall County monitor remains high and in violation, while the Ohio monitor now shows attainment of the standard. Ohio EPA believes emissions from West Virginia are the main source of the monitor exceedances. In support of the above statements, Ohio EPA analyzed monthly SO2 emission values for the period 2009 to 2012 for the major SO2 sources, and sources of interest, in the area alongside monthly average SO2 concentrations at monitoring site 54-051-1002 (Marshall County, WV monitor). Ohio EPA believes that this more complete analysis demonstrates that R.E. Burger and Ormet are not significantly impacting monitor 54-051-1002. Figure 1, below, shows monthly emissions from R.E. Burger plotted concurrently with monthly average concentrations at monitoring site 54-051-1002. Also shown in this graph is a 6-month rolling average of the monitored monthly average concentrations, which demonstrates the long-term trend of recorded concentrations.

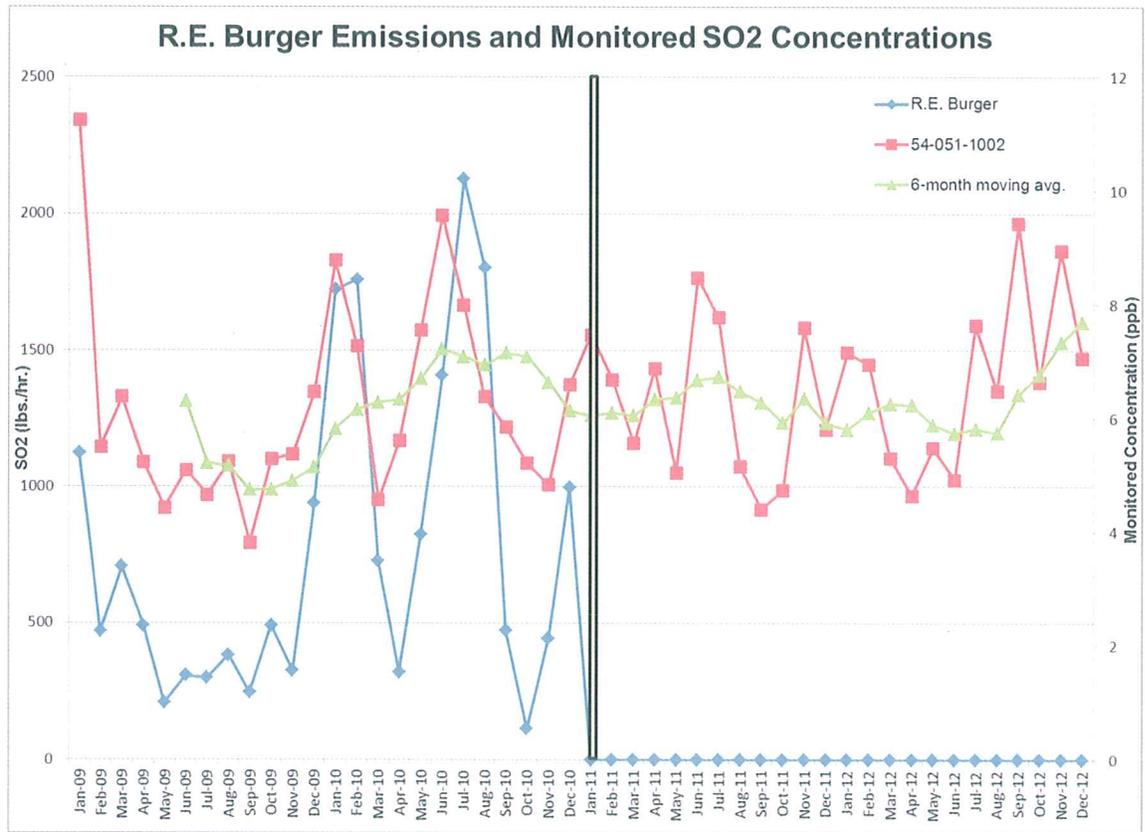


Figure 1: SO2 Emissions from R.E. Burger and monitored SO2 concentrations at site 54-051-1002. Emissions are plotted with the left-hand vertical axis, in lbs. SO2/hour. Monitored concentrations and the 6-month moving average are plotted with the right-hand vertical axis. The vertical bar represents the cessation of emissions from R.E. Burger.

Ohio EPA contends that if emissions from Burger were significantly impacting monitoring site 54-051-1002, a marked decline in monitored values would have been observed. From Figure 1, in particular the 6-month moving average, this is clearly not the case. Indeed, the 6-month rolling average is higher for the six months inclusive of December 2012 than any other 6-month period in the 2009 to 2012 period, a full two years after the cessation of operations at Burger. These data strongly suggest that emissions from Burger are not, and were not in the past, impacting in a significant way, concentrations at monitoring site 54-051-1002.

Figure 2 shows emission data from the Kammer and Mitchell facilities located in Marshall County, West Virginia plotted concurrently with monthly average concentrations at monitoring site 54-051-1002. Also shown in this graph is a 6-month rolling average of the monitored monthly average concentrations, which demonstrates the long-term trend of recorded concentrations.

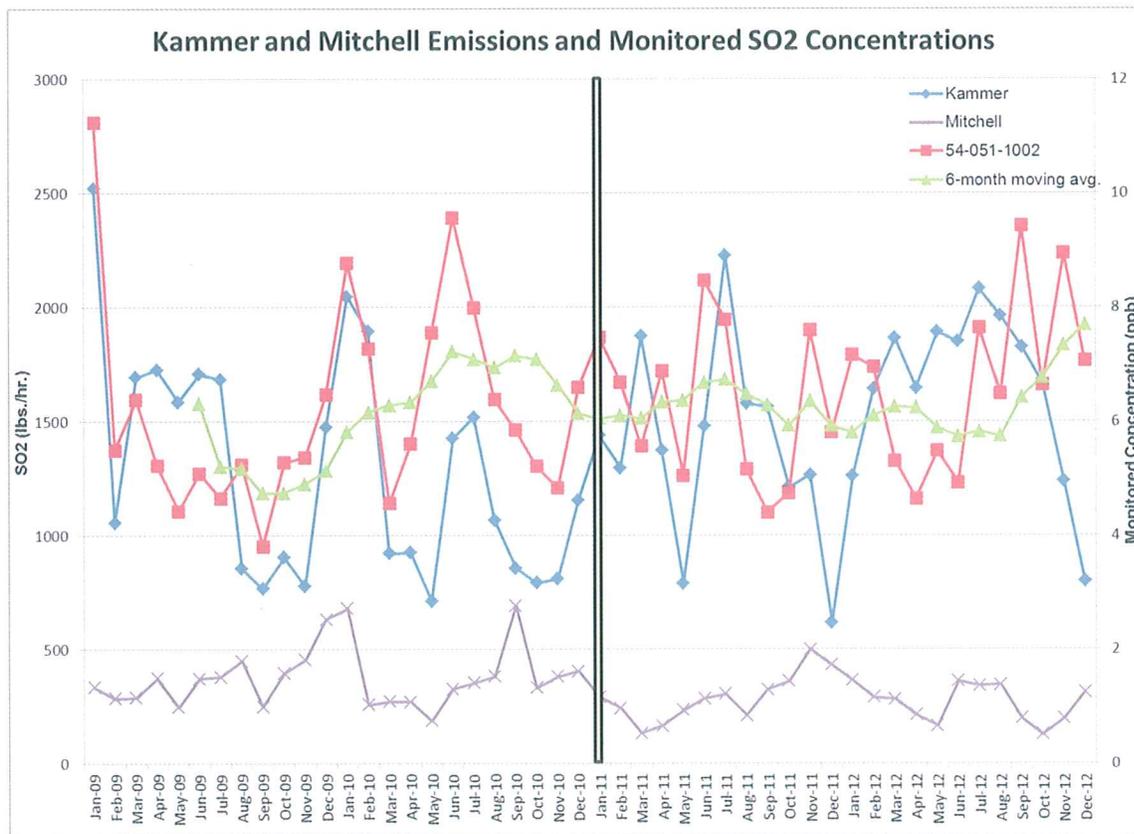


Figure 2: SO2 Emissions from Kammer and Mitchell, with monitored SO2 concentrations at site 54-051-1002. Emissions are plotted with the left-hand vertical axis, in lbs. SO2/hour. Monitored concentrations and the 6-month moving average are plotted with the right-hand vertical axis. The vertical bar represents the cessation of emissions from R.E. Burger.

Ohio EPA contends that there is a strong, clear correlation between emissions from Kammer and concentrations recorded at monitoring site 54-051-1002. These data show that in the two years following the cessation of operations at R.E. Burger,

monitored concentrations at site 54-051-1002 remain at previous levels, as do the emissions from Kammer.

Regarding emissions from Ormet and the proposed non-attainment designation request by West Virginia for Ohio Township in Monroe County, Ohio, Ohio EPA contends that U.S. EPA initially determined Ormet to not be a significant contributor to monitored concentrations at site 54-051-1002, and that the original unclassifiable designation should be retained. That combined emissions from major SO<sub>2</sub> sources in Marshall County, West Virginia are nearly 14 times greater than the single source in Monroe County suggests that reductions imposed on the Ormet facility would have little or no impact on monitored concentrations. This is supported by SO<sub>2</sub> emissions data<sup>1</sup> provided by Ormet for the 2011 to 2012 period, which is plotted concurrently with monthly average SO<sub>2</sub> concentrations recorded at site 54-051-1002 in Figure 3.

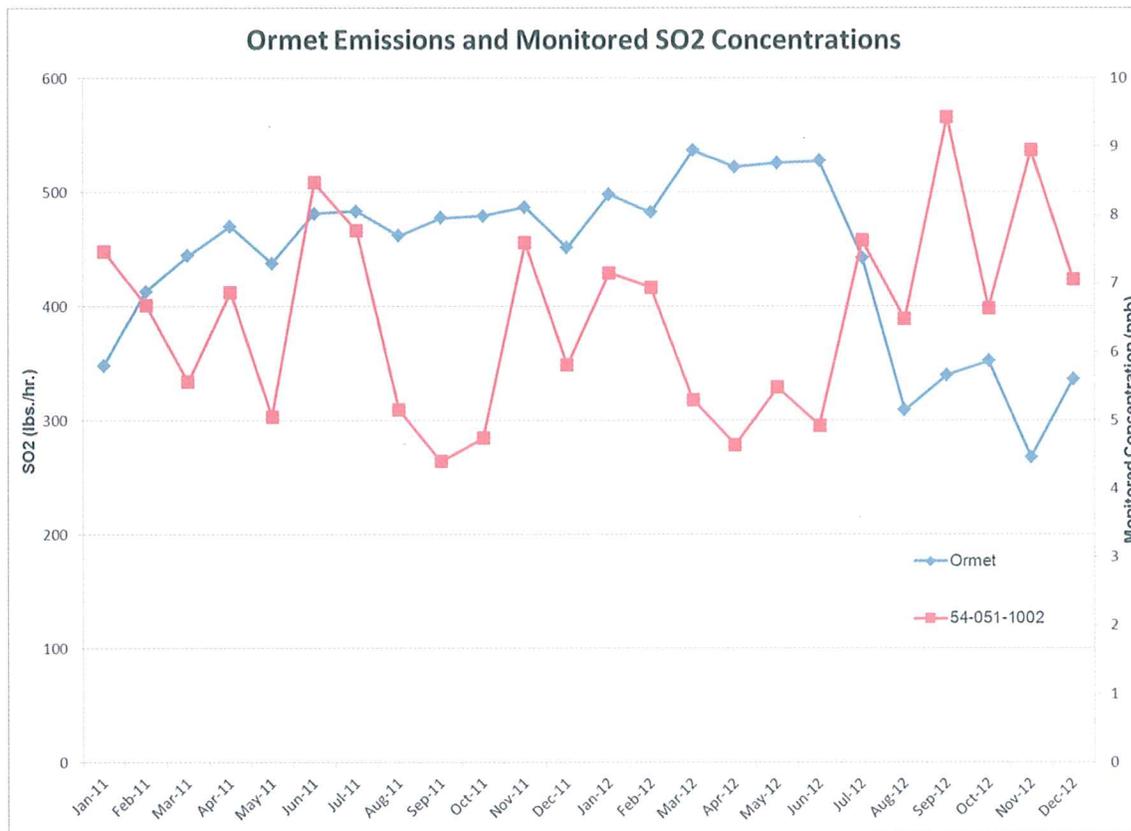


Figure 3: SO<sub>2</sub> Emissions from Ormet, with monitored SO<sub>2</sub> concentrations at site 54-051-1002. Emissions are plotted with the left-hand vertical axis, in lbs. SO<sub>2</sub>/hour. Monitored concentrations are plotted with the right-hand vertical axis.

<sup>1</sup> SO<sub>2</sub> emissions data from Ormet is determined from anode consumption and the sulfur content of the anodes on a monthly basis. These data are collected and reported as part of the facility's Title V Operating Permit.

Based on these data, there appears to be little to no correlation between emissions from Ormet and monitored concentrations. In particular, there is a marked decrease in emissions starting on August 2012, when operations at the facility were reduced to four potlines (where historical usage was six potlines). A concurrent decrease in monitored SO2 concentrations is not observed in the data recorded at site 54-051-1002. This supports Ohio EPA's contention that emissions from Ormet are not a significant contributor to SO2 concentrations at site 54-051-1002.

We appreciate your further consideration of this analysis and will continue to work with U.S. EPA in developing appropriate nonattainment boundaries to address the 2008 SO2 standard. If you have any further questions please feel free to contact Jennifer Dines at 614-644-3696.

Sincerely,



Scott Nally  
Director  
Ohio EPA

Cc: Bob Hodanbosi, Chief, Ohio EPA DAPC