



**Environmental  
Protection Agency**

John R. Kasich, **Governor**  
Mary Taylor, **Lt. Governor**  
Scott J. Nally, **Director**

**APR 12 2012**

Ms. Susan Hedman  
Regional Administrator  
U.S. EPA Region V  
77 W. Jackson Blvd.  
Chicago, IL 60604

**Re: Revised - Ohio's Recommended Designations for the 2010 1-hour SO<sub>2</sub>  
Standard**

Dear Administrator Hedman:

I am writing to submit a revision to Ohio's designations recommendation for the new sulfur dioxide (SO<sub>2</sub>) 1-hour primary standard of 75 ppb. Ohio's recommended designation for the 2010 1-hour SO<sub>2</sub> standard was submitted on June 3, 2011. Our analysis and recommendation for designations was based, in part, on ambient data for the period 2008 through 2010. Ohio EPA has reviewed ambient data for 2011 and has determined two additional areas are now attaining the standard.

The following designation recommendations are based on the most current SO<sub>2</sub> monitoring data along with the June 22, 2010 final rule (75 FR 33520), and March 24, 2011 memorandum entitled "Area Designations for the 2010 Revised Primary Sulfur Dioxide National Ambient Air Quality Standards." The final rule and memorandum directs states to submit their recommendations to U.S. EPA, designating all areas in the state as "attainment," "nonattainment" or "unclassifiable" based on a review of five factors: air quality data, emissions-related data, meteorology, geography/topography, and jurisdictional boundaries. Furthermore, the memorandum states that an area will be designated as:<sup>1</sup>

<sup>1</sup> Refer to Ohio's original June 3<sup>rd</sup> submittal for a general discussion on meteorology, geography/topography, and jurisdictional boundaries. Ohio EPA believes these three factors are not uniquely relevant to this revised designation.

- nonattainment when monitoring or modeling indicate a violation
- attainment when there are no monitored violations and any “needed” modeling analysis or other relevant information demonstrates no violations, or
- unclassifiable when there are no monitored violations and the area lacks any “needed” modeling or other information sufficient to support an alternative designation.

As stated in our original June 3<sup>rd</sup> submittal:

Ohio EPA is recommending certain areas be designated as attainment. Any area where monitoring is lacking and modeling is not appropriate (based on a lack of sources emitting 100 TPY and a lack of smaller sources with the potential to cause or contribute to a violation of the new SO<sub>2</sub> standard) is recommended as an attainment area. As stated in U.S. EPA’s final rule, the agency only intends to designate an area as attainment if monitoring and appropriate modeling data show no violations. As further stated in the SO<sub>2</sub> Designation Guidance, an area can be designated as attainment if there are no monitored violations and where appropriate modeling analysis is conducted, “if needed.” This approach is suitable as not all areas of a Ohio contained monitoring or have sources that emit over 100 TPY of SO<sub>2</sub> or have a collection of smaller sources that have the potential to cause or contribute to a violation of the SO<sub>2</sub> standard. In these cases modeling is not appropriate or necessitated and these areas should be designated as attainment consistent with U.S. EPA’s broader approach for designations. This document will provide adequate justification for such areas using data from the 2008 actual emissions information submitted by Ohio’s sources for incorporation into the 2008 National Emissions Inventory (NEI).

The remaining areas of the State are recommended as unclassifiable. After additional modeling occurs in the future, Ohio EPA will address areas recommended as unclassifiable in the upcoming Infrastructure SIP.

Therefore, Ohio is now recommending an unclassifiable designation for Belmont County and an attainment designation for Columbiana County rather than the originally recommended nonattainment designation in our June 3<sup>rd</sup> submittal.

This revision, or supplement, to our original June 3<sup>rd</sup> submittal only addresses Belmont and Columbiana Counties. Ambient monitoring data for the entire state was reviewed but resulted in no other necessary changes to our original recommendation. Therefore, we are not requesting changes to our recommendations for the remaining 86 counties in our original submittal.

## Ambient Air Quality Data

The air quality analysis looks at the 3-year average of the 99<sup>th</sup> percentile of the yearly distribution of 1-hour daily maximum SO<sub>2</sub> concentrations for each county based on data for 2009 through 2011. The level of the new 1-hour SO<sub>2</sub> standard is 75 ppb. Data is retrieved from the U.S. EPA's Air Quality System (AQS) at <http://www.epa.gov/ttn/airs/airsaqs/> and is presented in ppb in all tables. Monitoring sites that have less than 75 percent capture in any one quarter are highlighted in red. Ohio EPA operates a network of federally approved monitors. AQS data retrieval sheets are provided in Appendix A. The State and local air monitoring stations (SLAMS) data certification report for calendar year 2011 is provided in Appendix B.

Based on the most recent ambient data as shown in Table 1 below, Ohio has determined Belmont and Columbiana Counties are attaining the standard. Given the most recent data, Ohio is requesting Belmont County be designated unclassifiable and Columbiana County be designated attainment. The requested designations for all other counties remain the same as provided in our June 3, 2011 submittal.

County	Site	Year				Design Values	
		2008	2009	2010	2011	2008-2010	2009-2011
Belmont	39-013-3002	105	74	62	47	80	61
Columbiana	39-029-0022	111	113	47	27	90	62

Table 1: 2008-2011 Ambient Data and Design Values

The following maps show the locations of the above monitors:

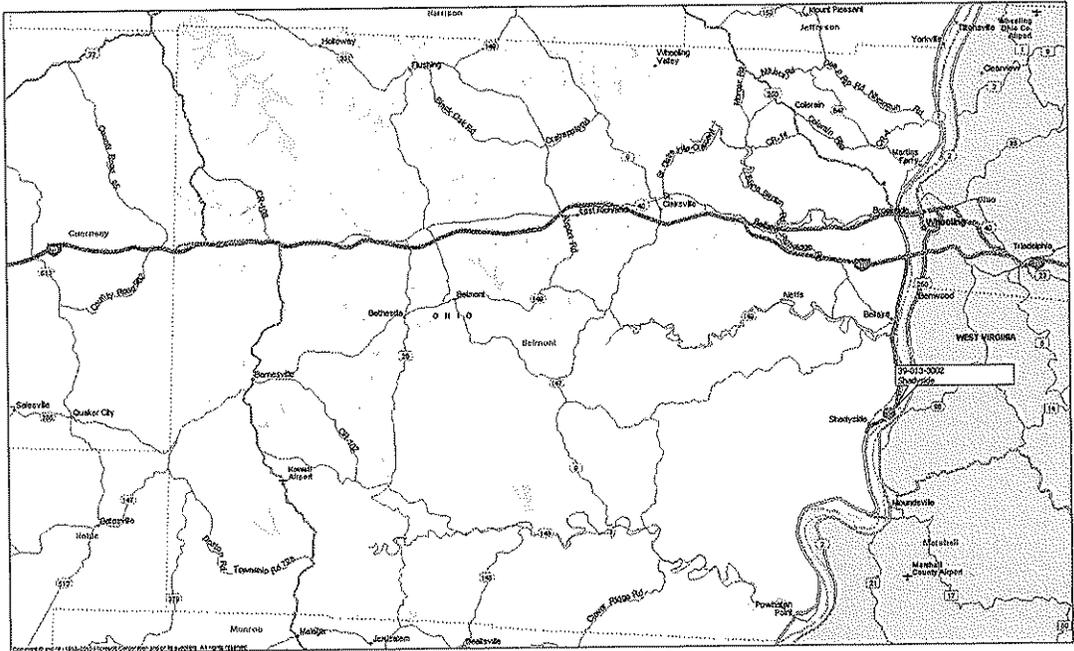


Figure 1: Belmont County SO2 Monitor

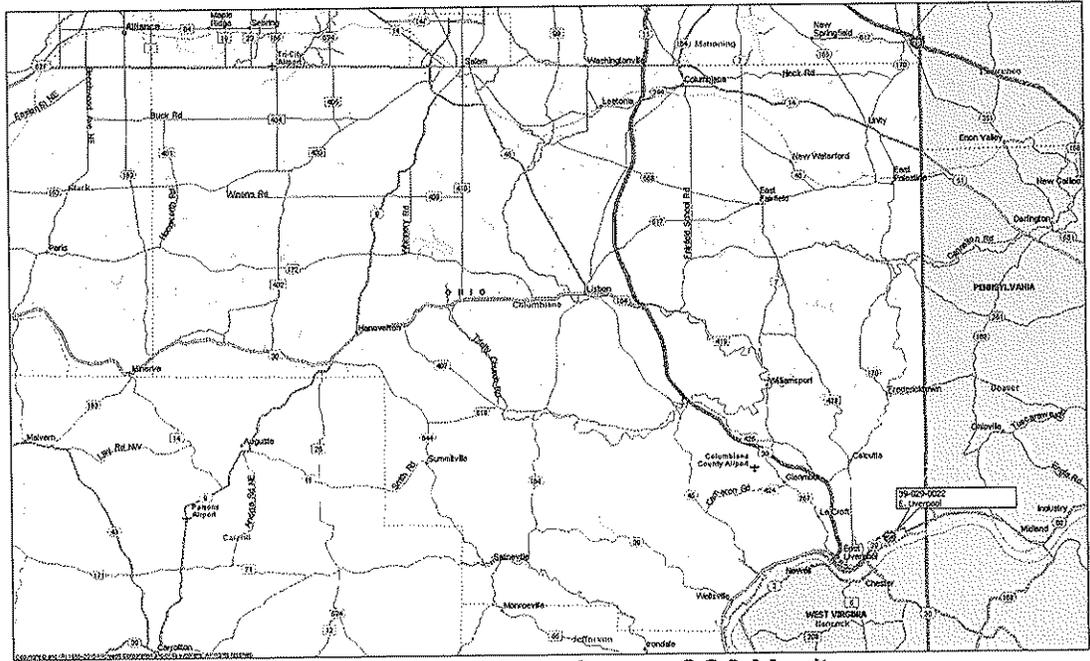


Figure 2: Columbiana County SO2 Monitor

## Emissions

### Belmont County

U.S. EPA's rule states that in order for an area to be designated attainment there must be monitoring and appropriate modeling, when "needed, showing no violations. Although Belmont County contains a monitor indicating attainment, there are, or may be, sources of emissions in the vicinity that may necessitate additional modeling in the future under Ohio's Infrastructure SIP.

Table 2 below displays 2008 SO<sub>2</sub> Emissions within 50 km of the non-violating monitor in Belmont County. There are 51,662.17 tons per year (TPY) of actual SO<sub>2</sub> emissions from Ohio within 50 km of the non-violating monitor. Of that total, 15,126 TPY was emitted from the R.E. Burger Plant which is no longer in operation.

State	County	Facility ID	Facility Name	2008 SO <sub>2</sub> Emissions (TPY)	Distance from Monitor (km)
OH	Belmont	0607130015	R. E. BURGER PLANT	15126.00	6.7
OH	Belmont	0607090013	Severstal Wheeling, Inc.- Martins Ferry	0.06	17.6
OH	Belmont	0607090208	Nickles Bakery of Martins Ferry Inc.	0.01	13.8
<b>Belmont Total</b>				<b>15126.07</b>	
OH	Jefferson	0641050002	Cardinal Power Plant (Cardinal Operating Company)	33311.90	32.6
OH	Jefferson	0641090010	Severstal Wheeling, Inc	699.99	40.9
OH	Jefferson	0641090234	Mingo Junction Energy Center, LLC	82.37	40.9
OH	Jefferson	0641120012	Severstal Wheeling, Inc - Yorkville Plant	0.24	31.6
<b>Jefferson Total</b>				<b>34094.50</b>	
OH	Monroe	0656000001	Ormet Primary Aluminum Corp.	2441.60	30.5
<b>Monroe Total</b>				<b>2441.60</b>	
<b>Grand Total</b>				<b>51662.17</b>	

**Table 2: 2008 Ohio Sources of SO<sub>2</sub> Emissions (TPY) within 50 Kilometers of the Belmont County Non-Violating Monitor**

Columbiana County

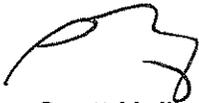
U.S. EPA's rule states that in order for an area to be designated attainment there must be monitoring and appropriate modeling, when "needed, showing no violations. Ohio EPA is recommending Columbiana County be designated as attainment. As indicated above, monitoring data now shows the area is attaining the standard. Furthermore, modeling of Columbiana County would not be appropriate based on a lack of sources emitting 100 or more tons of SO<sub>2</sub> per year and a lack of smaller sources with the potential to cause or contribute to a violation of the new SO<sub>2</sub> standard. Total county-wide actual emissions in Columbiana County in 2008 was 3.57 tons.

For the reasons stated above, Columbiana County should be designated as attainment consistent with U.S. EPA's broader approach for designations.

Ohio EPA provided a public comment period and held a public hearing on these revised recommendations on April 3, 2012 in Steubenville, Ohio. The public comment period closed on April 3, 2012 and no comments were received.

I appreciate the opportunity to provide these revised recommendations and will work cooperatively with U.S. EPA Region 5 staff as final designations are made. If you have any questions concerning this submittal, please feel free to contact Jennifer Dines of the Division of Air Pollution Control at (614) 644-3696.

Sincerely,



Scott Nally  
Director

Cc: Robert F. Hodanbosi, Chief Division of Air Pollution Control