



September 16, 2015

Regional Administrator Susan Hedman
U.S. Environmental Agency – Region V
77 West Jackson Boulevard
Mail Code: R-19J
Chicago, IL 60604-3507

SUBJECT: Updated Wisconsin Designation Recommendations for the 2010 1-Hour Sulfur Dioxide (SO₂)
National Ambient Air Quality Standard (NAAQS)

Dear Regional Administrator Hedman:

This letter addresses two groups of areas identified in Janet McCabe's March 20, 2015 letter to Secretary Stepp regarding future rounds of area designations for the 2010 1-hour SO₂ NAAQS. In the letter, and based on preliminary data, EPA identified one source (Columbia Energy Center) and one monitor (Green Bay East High in Brown County) in Wisconsin as meeting the criteria established in a March 2, 2015 court order.

The following recommendations and supporting information for EPA to consider when making final determinations associated with this first round of designations include:

- The Columbia Energy Center no longer meets the criteria established by the court order and is not subject to the designations timeline established in that order.
- Modeling conducted by the department and application of the five factors described in EPA's SO₂ area designations guidance indicate that EPA should designate the county in which Columbia Energy Center is located (Columbia County) as attainment for the 2010 1-hour SO₂ NAAQS.

Additionally, future intentions regarding the Brown County SO₂ monitor at Green Bay East High School are addressed in this letter.

Columbia Energy Center and Columbia County

In the March 20, 2015 McCabe letter, EPA proposed that Columbia Energy Center met the criteria established in the March 2, 2015 court order. Specifically, EPA's data showed that Columbia Energy Center exceeded a threshold of 16,000 tons of SO₂ in 2012 or emitted more than 2,600 tons of SO₂ and had an emission rate of at least 0.45 lbs. SO₂/MmBtu.

Since 2012, several changes affecting SO₂ emissions from the Columbia Energy Center have occurred. On June 18, 2013, the facility entered into consent decree 13-cv-266 with EPA and the Sierra Club, which required the installation and operation of pollution control equipment and practices that would achieve significant reductions of SO₂, NO_x and PM emissions. The consent decree specified that by January 1, 2015, the Columbia Energy Center had to continuously operate dry flue gas desulfurization (DFGD) so that units 1 and 2 could achieve and maintain a 30-day rolling average emission rate for SO₂ of no greater than 0.075 lbs/MmBtu. The consent decree further specified an annual SO₂ limit of 3,286 tons starting in 2015.

On September 10, 2015, WDNR revised the facility's construction permit (14-POY-174-R1, enclosed) to include limitations, conditions and other requirements contained in the consent decree, which make the SO₂ limitations and conditions permanent and federally enforceable. Since the facility is currently complying with a permanent and enforceable SO₂ limit below 16,000 tons, and otherwise does not meet the criteria as specified in the March

2, 2015 court order, the Columbia Energy Center is no longer subject to the July 2, 2016 round of area designations established by that order.

Based on a technical analysis, including dispersion modeling, completed by the department and provided as an enclosure to this letter, and considering subsequent guidance on SO₂ NAAQS implementation released by EPA, WDNR recommends that EPA designate the county in which Columbia Energy Center is located (Columbia County) as attainment for the 2010 1-hour SO₂ NAAQS. EPA's March 20, 2015 SO₂ area designations guidance describes five factors to consider when determining the appropriate attainment boundary when designating areas for the SO₂ NAAQS. WDNR has fully addressed these criteria in support of its recommendation, as follows:

1. Dispersion modeling results. WDNR modeled Columbia Energy Center's new limits using a dispersion modeling protocol based on EPA's December 2013 SO₂ NAAQS Designations Modeling Technical Assistance Document (TAD) and developed collaboratively with the facility and EPA Region 5. The results of the modeling (enclosed) show that the Columbia Energy Center will not violate the SO₂ NAAQS when complying with its new permanent and enforceable SO₂ limit.
2. Emissions-related data. As described in the enclosed analysis, the dispersion modeling conducted for Columbia Energy Center included and considered all stationary sources of SO₂ located within Columbia County.
3. Meteorology. As described in the enclosed analysis, WDNR's modeling included meteorology appropriate to the area as described in EPA's Designations Modeling TAD.
4. Geography and topography. WDNR considered geography and topography when considering both the sources to include in the modeling and where to place modeling receptors, taking into account specifically the Baraboo Hills area of the county. This is described further in the enclosed analysis.
5. Jurisdictional boundaries. EPA's SO₂ area designations guidance describes how county boundaries may be appropriate for defining attainment areas in the absence of any other relevant information that would help define a more specific boundary around the SO₂ source in question. WDNR has appropriately considered all SO₂ emissions sources in the county in the enclosed analysis, and the results support designating all of Columbia County as attainment.

Based on the five factor analysis, a designation of attainment for Columbia County, Wisconsin for the 2010 1-hour SO₂ NAAQS is supported. WDNR recommends that the EPA designate Columbia County as attainment at the earliest possible date, but no later than July 2, 2016.

Brown County

The March 20 letter also identified the Green Bay East High air quality monitor (55-009-0005) in Brown County as violating the 2010 1-hour SO₂ NAAQS based on preliminary 2012-2014 data and therefore potentially subject to the designations schedule established in the court order. EPA's SO₂ area designations guidance describes the consideration of certified 2015 SO₂ monitoring data for final determinations on designation recommendations. WDNR will evaluate the monitor's certified data once the 2015 monitoring season has concluded. If the resulting 2013-2015 monitored design value does not show a violation of the NAAQS, WDNR intends to recommend that EPA designate Brown County, Wisconsin as attainment at the earliest possible date, but no later than July 2, 2016.

Further, on April 8, 2013, the department recommended that EPA designate forty Wisconsin counties as attainment for 2010 1-hour SO₂ NAAQS, including Brown County. As WDNR conveyed at the time, Brown County's monitored design value was below the NAAQS, as had been the case for several years. WDNR believes

EPA should have already designated Brown County as attainment based on that information, and requests EPA act expediently on any further attainment recommendation WDNR may make for this county in 2016.

Thank you for considering this information and Wisconsin's recommendations. If you have any questions or require additional information, please contact Gail Good, acting Air Director, at Gail.Good@wisconsin.gov or 608-266-1058.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bart Sponseller', with a long horizontal line extending to the right.

Bart Sponseller
Deputy Division Administrator
Environmental Management Division

Enclosures

cc: Cathy Stepp, Secretary
Mike Bruhn, Assistant Deputy Secretary
Pat Stevens, Administrator, Environmental Management Division
Gail Good, Acting Air Director

