



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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CHICAGO, IL 60604-3590

MAR 25 2016

REPLY TO THE ATTENTION OF:

Keith Baugues
Assistant Commissioner, Office of Air Quality
Indiana Department of Environmental Quality
100 N. Senate Avenue
Indianapolis, Indiana 46204

Dear Mr. Baugues:

On behalf of the U.S. Environmental Protection Agency, I would like to thank you for your January 7, 2016 submittal identifying sources to be characterized under the sulfur dioxide (SO₂) Data Requirements Rule (DRR).¹ I am writing to respond to your submittal, to include additional sources to be characterized under this rule, and to provide additional information about the next steps in this source characterization effort, which will result in important data that states and EPA will use to protect public health.

EPA has reviewed your agency's submittal and is identifying six additional sources that the DRR requires to be characterized (i.e., "applicable sources"). The available information indicates that your submittal did not include five sources of SO₂ with emissions at or in excess of 2,000 tpy that are not located in a nonattainment area. These sources, which are subject to the current round of designations ("consent decree sources"), meet the criteria for listing under the DRR and thus must be listed, notwithstanding the information your state has already provided and notwithstanding the degree to which you may already have satisfied initial air quality characterization requirements of the DRR. Accordingly, EPA is adding the following five sources to your state's list of applicable sources under the DRR:

Source(s)	County	2014 Emissions
A.B. Brown Generating Station	Posey	8,080 tons
Clifty Creek Generating Station	Jefferson	3,731 tons
Gibson Generating Station	Gibson	22,055 tons
Michigan City Generating Station	LaPorte	15,991 tons
Rockport Generating Station	Spencer	54,979 tons

The DRR also requires characterization of certain sources with annual emissions below 2,000 tpy as applicable sources. EPA has identified and is adding the following such source to your state's list of applicable sources under the DRR:

¹ "Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS); Final Rule," 80 *Federal Register* 51052, August 21, 2015.

Source(s)	County	Estimated typical emissions
U.S. Mineral Products ("Isolatek")	Huntington	800 to 900 tpy

Although this source emits less than 2,000 tpy, we have sufficient concerns about air quality in the vicinity of this source to warrant listing this source as subject to the air quality characterization requirements of the DRR. Further information on this source is provided in the attachment to this letter.

Under the DRR implementation schedule, state air agencies were required to submit to EPA by January 15, 2016 a list that identifies all sources within the state's jurisdiction with SO₂ emissions of 2,000 tpy or more during the most recent year for which emissions data are available. The DRR also provided for air agencies or EPA to include sources with SO₂ emissions below 2,000 tpy on a state's source list where characterization of air quality around the sources is warranted.

Once sources are listed, the DRR requires state air agencies to characterize ambient SO₂ levels in the areas near the sources. The DRR provides that this air quality characterization may be accomplished either by modeling or by monitoring air quality around the listed sources. Alternatively, for a source listed because it emitted more than 2,000 tpy, an air agency may avoid this requirement by adopting federally enforceable emission limits by January 13, 2017 that ensure that the source will emit less than 2,000 tpy of SO₂.

The next key milestone for purposes of DRR implementation is July 1, 2016, the date by which each air agency must identify, for each listed source, the approach it will use to characterize air quality in the respective area (air quality modeling, ambient monitoring, or establishment of a federally enforceable emission limit).

For sources that an air agency decides to evaluate through air quality modeling, the DRR requires the air agency to submit a modeling protocol to the EPA Regional Administrator by July 1, 2016, and the completed modeling analysis by January 13, 2017. For sources that an air agency decides to evaluate through ambient monitoring, the air agency will need to identify appropriate sites to characterize peak 1-hour SO₂ concentrations, and may need to relocate existing monitors or install new monitors at such sites. As further required under the DRR, the air agency must submit information about monitoring sites to the EPA Regional Administrator by July 1, 2016, as part of its annual monitoring network plan and in accordance with EPA's monitoring requirements specified in 40 CFR part 58. The air agency must also ensure that ambient monitors will be operational by January 1, 2017.

As noted earlier, in lieu of characterizing air quality around a source with SO₂ emissions that are at or above 2,000 tpy, air agencies may indicate by the July 1, 2016, deadline that they will adopt federally enforceable emissions limitations that will limit the SO₂ emissions of a source to a suitable level below 2,000 tpy. Such limits must be adopted and effective by January 13, 2017. The DRR requires that an air agency provide a description of the requirements and emission limits that the air agency intends to apply for the affected sources in their July 1, 2016, submittal.

We look forward to a continued dialogue with you and your staff as you prepare the required submittals that are due on July 1, 2016. To assist in this process, we are available to discuss any technical issues that you may have concerning either modeling or monitoring in order to assist you in meeting this requirement.

Please note that a copy of each state air agency's submittal and a compiled national list of sources subject to DRR requirements are posted on EPA's SO₂ implementation website at www3.epa.gov/airquality/sulfurdioxide/implement.html. We also plan to post this letter on that site and to update the compiled national list with the sources added by this letter as described above in the near future.

Again, thank you for your letter and for your efforts to implement this important standard. For additional information concerning the DRR, please visit our SO₂ implementation website listed above. For additional information regarding designations under the SO₂ standard, please visit our website at www.epa.gov/so2designations. Should you have any questions, please do not hesitate to call me or contact George Czerniak, Air and Radiation Division Director, at 312-353-2212 or czerniak.george@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Robert A. Kaplan". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert A. Kaplan
Acting Regional Administrator

Attachment

Review of List of Indiana Sources Subject to
Sulfur Dioxide (SO₂) Data Requirements Rule (DRR)

As required by the DRR, on January 7, 2016, Indiana submitted a list of sources to be subject to provisions of the DRR for air quality characterization or otherwise addressing nearby air quality. All of the sources listed by Indiana were listed because their recent emissions exceeded 2,000 tons per year (tpy).

The DRR provides that, in addition to sources emitting over 2,000 tpy, sources emitting less than 2,000 that nevertheless have high potential for causing violations of the SO₂ air quality standard may also be listed at the discretion of the state and EPA. EPA is concerned about the potential for violations in the vicinity of the U.S. Mineral Products, known as Isolatek, a mineral wool manufacturer located near Huntington, Indiana. The following sections describe the evidence regarding recent emissions at Isolatek and the reasons that EPA believes that Isolatek warrants listing as subject to the DRR.

Emissions from Isolatek

A critical challenge in assessing emissions from Isolatek is addressing the emissions arising from sulfur contained in the slag that the company processes. Emissions for this facility have been estimated by using the AP-42 emission factor for SO₂ emissions, which for cupolas at mineral wool manufacturing facilities is 8.0 pounds of SO₂ per ton of feed charged. However, the rating of this emission factor is D, and actual emissions from a mineral wool manufacturer can be highly dependent on the sulfur content of the slag.

A better estimate of the emissions from this facility is obtained by applying the results of a stack test conducted on December 18, 2007. This stack test indicated emissions of 21.6 pounds of SO₂ per ton of charged material.

The emissions rate reported for 2014 in the draft 2014 National Emissions Inventory was 164 tons. We believe a more appropriate emission estimate for this facility would be based on a cupola emission factor of 21.6 pounds per ton rather than 8.0 pounds per ton. Thus, we believe that a more appropriate estimate of 2014 emissions from this facility would be approximately 444 tons of SO₂.

Furthermore, based on production data obtained by Region 5's Air Enforcement and Compliance Assurance Branch, 2014 seems to have been a year with unusually low production, with production at about 36 percent of capacity. Available evidence indicates that the company produced as much mineral wool in the first half of 2015 as it produced in all of 2014. Production in 2015 appears more representative of normal production. Thus, emissions during times of normal production appear to be over 800 tons per year.

Modeling Evidence

Preliminary modeling conducted by EPA estimated concentrations well over the SO₂ standard, with a design value (without background) estimated to be 6,337 ppb. These results are consistent with information that EPA obtained that the stack at Isolatek is relatively short, having a height of 14.6 meters, or 48 feet. This modeling indicates the need for further air quality characterization of this source pursuant to the data requirements rule to determine whether in fact violations of the SO₂ standard are occurring near this source.

Conclusion

Isolatek has significant potential for causing violations of the SO₂ standard. Further review is warranted to determine whether violations are in fact occurring near this facility. Thus, this facility appears to warrant listing as a source subject to the requirements of the DRR.