



STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR
KIM REYNOLDS, LT. GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR

June 20, 2016

Mark J. Hague
Regional Administrator
Region 7, U.S. Environmental Protection Agency
11201 Renner Blvd
Lenexa, KS 66219

Dear Regional Administrator Hague:

The Iowa Department of Natural Resources (DNR) is notifying the U.S. Environmental Protection Agency (EPA) of the methods the state will use to characterize sulfur dioxide (SO₂) emissions in areas containing sources subject to the 1-hour SO₂ Data Requirements Rule (DRR; 80 FR 51051, August 21, 2015).

In a letter to EPA dated December 15, 2015, the DNR identified eleven sources that met the applicability criteria of the DRR. In a response dated April 7, 2016, the EPA concurred with the DNR's source list. For each area that contains one or more of the applicable sources 40 CFR 51.1203(b) requires that the DNR notify EPA by July 1, 2016, whether it will: characterize peak 1-hour SO₂ concentrations in each area through ambient air quality monitoring; characterize peak 1-hour SO₂ concentrations in each area through air quality modeling techniques; or provide federally enforceable emission limitations by January 13, 2017, that limit emissions of applicable sources to less than 2,000 tons per year, or provide documentation that the applicable source has permanently shut down.

The table below identifies the method the DNR will use to characterize SO₂ emissions in each area in Iowa that contains one or more sources subject to the DRR. For convenience purposes areas are identified by county name. The DRR requires that the same technique be used in any area with multiple applicable sources. Linn and Woodbury Counties each contain two DRR sources and modeling will be used in both areas. Modeling will also be used in four other areas (Des Moines, Louisa, Pottawattamie, and Wapello Counties). In Allamakee, Clinton, and Scott Counties the emissions of the applicable sources will be limited to less than 2,000 tons per year.

County	Facility ID	Facility (Source) Name	Method
Allamakee	03-03-001	IPL - Lansing Generating Station	Limit emissions
Clinton	23-01-014	IPL - M. L. Kapp Generating Station	Limit emissions
Des Moines	29-01-013	IPL - Burlington Generating Station	Modeling
Linn	57-01-042	IPL - Prairie Creek Generating Station	Modeling
Linn	57-01-080	ADM Corn Processing - Cedar Rapids	Modeling
Louisa	58-07-001	MidAmerican Energy Co - Louisa Station	Modeling
Pottawattamie	78-01-026	MidAmerican Energy Co - Walter Scott Jr Energy Center	Modeling
Scott	82-02-006	MidAmerican Energy Co - Riverside Station	Limit emissions
Wapello	90-07-001	IPL - Ottumwa Generating Station	Modeling
Woodbury	97-04-010	MidAmerican Energy Co - George Neal North	Modeling
Woodbury	97-04-011	MidAmerican Energy Co - George Neal South	Modeling

Modeling

For each area using air quality modeling 40 CFR 51.1203(d) requires the DNR to submit modeling protocols to EPA by July 1, 2016. As described below the DNR has fulfilled this obligation.

The sources in Des Moines, Wapello, and Woodbury Counties are directly or indirectly affected by the July 2, 2016, designation deadline established in the March 2, 2015, consent decree resolving *Sierra Club, et al. v. McCarthy*, Case No. 3:13-cv-3953-SI (U.S. District Court for the Northern District of California). To accommodate EPA's approaching designations deadline the DNR previously supplied the modeling protocols for the affected sources (IPL - Burlington Generating Station, IPL - Ottumwa Generating Station, MidAmerican Energy Co - George Neal North, and MidAmerican Energy Co - George Neal South). Additionally, all modeling of the affected sources was previously completed and the results were used by the state to support the updated designation recommendations for Des Moines, Wapello, and Woodbury Counties sent to EPA on November 4, 2015. EPA notified the state on February 16, 2016, of their intended designations for those counties, which in some cases varied from the state's recommendations. The DNR provided supplemental information to EPA on April 4, 2016, that continues to support designations of attainment for Des Moines, Wapello, and Woodbury Counties. No further action by the state is needed at this time for these areas.

On December 15, 2015, the DNR submitted modeling protocols to address the affected sources in Louisa and Pottawattamie Counties (MidAmerican Energy Co.'s Louisa and Walter Scott Jr. Energy Center generating stations, respectively). The modeling protocols for the applicable sources in Linn County, ADM Corn Processing - Cedar Rapids and IPL - Prairie Creek Generating Station, were submitted on February 12, 2016, and March 14, 2016, respectively. To satisfy the requirements of 40 CFR 51.1203(d)(1) each modeling protocol includes information about the model to be used, modeling domain, receptor grid, emissions dataset, meteorological dataset, and how the DNR will account for background SO₂ concentrations. The DNR received verbal approval of all four modeling protocols from EPA on March 22, 2016.

Limit Emissions

Three sources in Iowa subject to the DRR have or will have federally enforceable emission limits that restrict their potential SO₂ emissions to below 2,000 tons per year: IPL - Lansing Generating Station in Allamakee County, IPL - M. L. Kapp Generating Station in Clinton County, and MidAmerican Energy Co - Riverside Station in Scott County. To comply with 40 CFR 51.1203(b) the DNR is providing a description of the requirements and emission limitations that will apply to each source. Since nearly all SO₂ emissions at each facility are attributable to coal combustion only the coal-fired boilers need to be discussed.

Unit 4 is the only remaining coal-fired boiler at IPL's Lansing Generating Station. Units 1, 2, and 3 are permanently shut down and their air construction permits have been rescinded.¹ The federally enforceable consent decree (No. C15-0061 EJM) entered on September 2, 2015, in the United States District Court for the Northern District of Iowa, Cedar Rapids Division, between the United States of America; the State of Iowa; Linn County, Iowa; the Sierra Club; and IPL requires that, commencing no later than 30 operating days after December 31, 2016, and continuing thereafter, Lansing Unit 4 must achieve and maintain a 30-day rolling average emission rate for SO₂ of no greater than 0.075 lb/MMBtu. Assuming continuous operation, the 0.075 lb/MMBtu emission limit, in combination with the unit's maximum rated capacity of 2,603 MMBtu/hr, will limit the facility's potential to emit SO₂ to 855 tons per year. At the request of the facility, through applications received on February 26, 2016, the DNR intends to include the 0.075 lb/MMBtu emission limit in a federally enforceable air construction permit and to establish a compliance deadline that occurs no later than January 13, 2017.

At IPL's M. L. Kapp Generating station all coal combustion activities have ceased. Unit 1 is permanently shut down and its air construction permit has been rescinded.² Unit 2 switched fuel from coal to natural gas ahead of the August 31, 2015, deadline established in the federally enforceable consent decree referenced above (No. C15-0061 EJM). Since Unit 2 must only burn natural gas and is prohibited by Condition 14.A in air construction permit 78-A-157-P9 from

¹ The air construction permit for Units 1 and 2 at IPL's Lansing Generating Station (permit number 74-A-097-S2) was rescinded on February 4, 2011. The air construction permit for Unit 3 (permit number 73-A-132-S5) was rescinded on July 3, 2013. Copies of the permit rescission letters are available upon request.

² The air construction permit for Unit 1 at IPL's M. L. Kapp Generating Station (permit number 74-A-177-S) was rescinded on February 4, 2011. A copy of the permit rescission letter is available upon request.

burning more than 10,746,943,000 cubic feet of natural gas per rolling 12-month period, this source has the potential to emit approximately 3 tons per year of SO₂.

Two of the three coal-fired boilers at MidAmerican Energy Co.'s - Riverside Station have permanently retired from service and no longer have air construction permits.³ The remaining boiler, Unit 9, is restricted to burning only natural gas by a federally enforceable condition established in air construction permit 93-A-339-S2. This constraint, in combination with Unit 9 having a maximum rated capacity of 1,202 MMBtu/hr, limits potential SO₂ emissions from this source to approximately 3 tons per year.

Please contact Matthew Johnson at 515-725-9554 or Matthew.Johnson@dnr.iowa.gov if you have questions or need additional information.

Sincerely,



Chuck Gipp
Director, Iowa Department of Natural Resources

c: Catharine Fitzsimmons, DNR-AQB
Matthew Johnson, DNR-AQB

³ Units 7 and 8 at MidAmerican's Riverside Generating Station were removed in air construction permit 93-A-339-S2 (issued October 13, 2015). This permit also contains the requirement that Unit 9 must burn only natural gas. A copy of the permit is available upon request or through the [Iowa DNR](http://www.dnr.iowa.gov) website.