



MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-564-3350
TELEFAX: 502-564-7484

R. BRUCE SCOTT
DEPUTY SECRETARY

January 6, 2017

Ms. Heather McTeer Toney
Regional Administrator
U.S. EPA, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303-3104

Re: Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS)

Dear Ms. Toney:

On behalf of the Commonwealth of Kentucky, the Energy and Environmental Cabinet (Cabinet) respectfully submits the attached documentation to comply with the United States Environmental Protection Agency's (EPA's) Data Requirements Rule (DRR) for the 2010 1-hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS).¹ In a letter dated January 7, 2016, the Cabinet identified fifteen (15) sources located in Kentucky that actually emitted more than 2,000 tons of SO₂ in 2014.² On March 22, 2016, EPA responded and added an additional source to Kentucky's list of applicable sources under the DRR.

Through this submittal, the Cabinet is providing air dispersion modeling analyses to characterize the air quality around nine (9) sources subject to the DRR, including one source that established a federally-enforceable limit through a title V permit revision. Additionally, the Cabinet is submitting documentation relating to the shutdowns of coal-fired electric generating units at three (3) sources, the ambient monitoring information to determine concentrations from three (3) sources, and a title V permit that establishes a federally-enforceable emission limitation of less than 2,000 tons per year at one (1) facility. The Cabinet is providing the enclosed DVD containing the modeling characterizations and attachments relating to emission limitations and shutdowns.

Modeling Requirements [40 CFR 51.1203(d)]

Pursuant to the requirements of 40 CFR 51.1203(d), the Cabinet submits the air dispersion modeling protocols and analyses characterizing the air quality surrounding the sources

¹ Published in the Federal Register, August 21, 2015 (80 FR 51052).

² As required by 40 CFR 51.1203 (80 FR 51087)

identified in Table 1. Peak hourly concentrations from each source were modeled and evaluated for compliance with the 2010 SO₂ NAAQS. The results of air dispersion modeling analyses predict 1-hour SO₂ concentrations of the areas to be less than the 2010 SO₂ NAAQS. The Cabinet provided the modeling protocols to EPA Region 4, received technical feedback, and amended the characterizations to concur with EPA’s response. These technical demonstrations further support Kentucky’s designation recommendations submitted on June 2, 2011. Therefore, the Cabinet requests that EPA designate the areas surrounding each facility as “attainment.”

Table 1: Sources Modeled [40 CFR 51.1203(d)]

<i>AFS #</i>	<i>Facility</i>	<i>Modeling Protocol Received</i>	<i>Transmitted to EPA</i>	<i>EPA Response</i>
21-015-00029	Duke Energy – East Bend Station	3/4/2016	3/4/2016	4/20/2016
21-041-00010	KU – Ghent	12/21/2015	2/10/2016	4/1/2016
21-059-00027	OMU – Elmer Smith Station	1/6/2016	2/10/2016	4/1/2016
21-091-00004	Century Aluminum – Hawesville	1/7/2016	2/10/2016	4/1/2016
21-145-00006	TVA – Shawnee	12/21/2015	2/10/2016	4/1/2016
21-177-00006	TVA – Paradise	12/21/2015	2/10/2016	4/1/2016
21-161-00009	EKPC – HL Spurlock	12/28/2015	2/10/2016	4/1/2016
21-223-00002	LG&E – Trimble	12/21/2015	2/10/2016	4/1/2016
21-183-00069	Big Rivers – DB Wilson	6/17/2015	7/8/2015	8/6/2015

Federally-enforceable requirement to limit SO₂ emissions to under 2,000 tons per year [40 CFR 51.1203 (e)]

Effective June 17, 2016, the Cabinet issued a final title V permit (V-12-019 R2) to East Kentucky Power Cooperative for operation of the John S. Cooper Power Station (AFS# 21-199-00005). The permit includes a federally-enforceable source-wide emissions limit of 1,800 tons SO₂ per year, on a 12-month rolling basis. The issuance of the permit followed all applicable regulatory provisions required to issue a title V permit in the Commonwealth of Kentucky. The Cabinet submits that the adoption of federally-enforceable emissions limits in the permit, in lieu of characterizing the area through modeling or monitoring, satisfies the requirements of 40 CFR 51.1203(e)(1) for this area. The Cabinet requests that the area surrounding this facility be designated as attainment.

Enforceable emission limits providing for attainment (40 CFR 51.1204)

Effective June 20, 2016, the Cabinet issued a final title V permit (V-16-013) to Big Rivers, Inc. for the operation of the DB Wilson plant (AFS#21-183-00069). The title V permit, V-16-013, establishes federally-enforceable SO₂ emission limitation for unit W1 to support a demonstration of attainment of the 2010 SO₂ NAAQS for the surrounding area. Air quality modeling and analysis demonstrate that all modeling receptors in the area will not violate the SO₂ NAAQS, when taking into account the updated allowable emission limits contained in the final title V permit. The Cabinet determines that this demonstration of attainment precludes further “ongoing data requirements” as required in 40 CFR 51.1205. The Cabinet requests that the area surrounding this source be designated as attainment.

Document that the applicable sources in the area have permanently shut down by January 13, 2017 [40 CFR 51.1203(e)(2)]

The sources identified in Table 2 have permanently shut down all coal-fired units; thus reducing their “potential-to-emit” SO₂ emissions below the regulatory thresholds. Documentation from the individual sources is included in this submittal and demonstrates that these areas comply the requirements of 40 CFR 51.1203 (e)(2). The Cabinet requests that the areas surrounding these facilities be designated as attainment.

Table 2: Sources with permanently shut down coal-fired units [40 CFR 51.1203 (e)(2)]

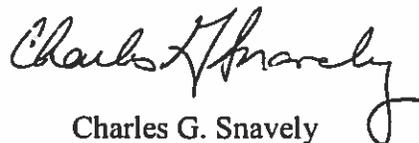
<i>AFS #</i>	<i>Source</i>	<i>Permit Number</i>	<i>Public Notice</i>	<i>Final</i>
21-111-00126	LG&E – Cane Run	175-00-TV	8/30/2014	11/18/2014
21-127-00003	KY Power CO – Big Sandy Plant	V-15-013	6/10/2015	10/16/2015
21-177-00001	KU – Green River Station	Shutdown Notification Letter	Shutdown Notification Letter	Shutdown Notification Letter

Monitoring Requirements [40 CFR 51.1203(c)]

The Cabinet will characterize and determine the ambient concentrations of SO₂ emissions from Century Aluminum – Sebree (AFS# 21-101-00029) and Big Rivers – Sebree (Reid, HMP&L, Green; AFS #s 21-233-00001, 21-233-00052) by collecting data with ambient air monitors in accordance with 40 CFR Parts 50, 53, and 58. The final SO₂ monitoring site selection was submitted to EPA for approval on June 27, 2016, and included in the Annual Ambient Air Monitoring Network plan. On August 4, 2016, EPA approved the monitoring site location to be used to satisfy the requirements of 40 CFR 51.1203(c) and granted approval of the Quality Assurance Project Plan (QAPP) on December 23, 2016. The Cabinet understands that this monitor must be operational by January 1, 2017, and remain in operation, unless the monitor has been approved for shut down by the EPA Regional Administrator pursuant to 40 CFR 51.1203(c)(3) or 40 CFR 58.14.

In conclusion, the Cabinet is providing the enclosed information to satisfy the air agency requirements section 51.1203 of the DRR. Further, the Cabinet requests that EPA determine that the areas are attaining the 2010 1-hour SO₂ NAAQS for the areas that characterized and determined to be in compliance with the NAAQS. If you have any questions or concerns, please contact Mr. Sean Alteri, Director of the Kentucky Division for Air Quality, at (502) 782-6541 or Sean.Alteri@ky.gov.

Sincerely,



Charles G. Snavelly
Secretary