

15A NCAC 02D .0608 OTHER LARGE COAL OR RESIDUAL OIL BURNERS

(a) The owner or operator of a fuel burning unit shall determine sulfur dioxide emissions into the ambient air if the unit:

- (1) burns coal or residual oil;
- (2) is not required to monitor sulfur dioxide emissions by 15A NCAC 02D .0524 or 02D .0606;
- (3) has a total heat input of more than 250 million Btu per hour from coal and residual oil; and
- (4) has an annual average capacity factor greater than 30 percent as determined from the three most recent calendar year reports to the Federal Power Commission or as otherwise demonstrated by the owner or operator. If the unit has not been in existence for three calendar years, its three-calendar-year average capacity factor shall be determined by estimating its annual capacity factors for enough future years to allow a three-calendar-year average capacity factor to be computed. If this three-calendar-year average capacity factor exceeds 30 percent, the unit shall be monitored. If this three-calendar-year average capacity factor does not exceed 30 percent, the unit is not required to be monitored.

(b) Once the unit is being monitored in accordance with Paragraph (a) of this Rule, it shall continue to be monitored until its most recent three-calendar-year average capacity factor does not exceed 25 percent. If the unit is not being monitored in accordance with Subparagraph (a) of this Rule, it need not be monitored until its most recent three-calendar-year average capacity factor exceeds 35 percent.

(c) If units required to be monitored have a common exhaust or if units required to be monitored have a common exhaust with units not required to be monitored, then the common exhaust may be monitored and the sulfur dioxide emissions are not required to be apportioned among the units with the common exhaust.

(d) The owner or operator of the source shall determine sulfur dioxide emissions by:

- (1) an instrument for continuous monitoring and recording of sulfur dioxide emissions; or
- (2) analyses of representative samples of fuels to determine Btu value and percent sulfur content.

(e) The owner or operator of a source subject to this Rule that is required to monitor emissions of sulfur dioxide pursuant to any State rule or federal regulation with continuous emission monitoring systems shall monitor compliance with the sulfur dioxide emission standard in 15A NCAC 02D .0516 with a continuous emission monitoring system. Compliance with sulfur dioxide emission standards shall be determined by averaging hourly continuous emission monitoring system values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values are added and the sum shall be divided by 24. With the exception of opacity monitoring, a minimum of four data points, containing one data point in each of the 15-minute quadrants of the hour is required to determine a valid hour value unless the continuous emission monitoring system is installed that meets the requirements of 40 CFR Part 75. If a continuous emission monitoring system is installed that meets the requirements of 40 CFR Part 75, the minimum number of data points shall be determined by 40 CFR Part 75.

(f) For emissions of sulfur dioxide, fuel analysis may be used in place of a continuous emissions monitoring system if the source is not required to monitor emissions of sulfur dioxide using a continuous emissions monitoring system pursuant to a State rule or federal regulation. If fuel analysis is used as an alternative method to determine emissions of sulfur dioxide, then:

- (1) for coal, the test methods described in 15A NCAC 02D .2600 shall be used except that gross or composite samples, gross caloric value, moisture content, and sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined by sampling the fuel as fired if the owner or operator demonstrates that sampling as fired provides a more accurate estimate of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined by sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour samples shall be composited into a daily sample and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in 15A NCAC 02D .2600. The sulfur dioxide emission rate shall also be determined using fuel analysis data. Sulfur retention credit shall be granted and used for computing sulfur dioxide emission rates if a source, on a case-by-case basis, quantitatively and empirically demonstrates the sulfur retention.
- (2) for residual oil, the test methods described in 15A NCAC 02D .2600 shall be used except that sulfur content shall be determined per shipment. Alternatively, gross or composite samples, gross caloric value, moisture content, and sulfur content may be determined sampling the fuel as fired if the owner or operator demonstrates that by sampling as fired provides a more accurate estimate of sulfur dioxide emissions than sampling each shipment. If sulfur dioxide emissions are determined by sampling fuel as fired, then a fuel sample shall be taken every four hours. These four-hour

samples shall be composited into a daily sample and the daily sample shall be composited into a weekly sample. This weekly sample shall be analyzed using the procedures in Section .2600 of this Subchapter. Residual oil shall be collected in accordance with ASTM D4177 or D4057.

(g) The owner or operator of the source may request to use a different procedure or methodology than that required by this Rule if one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists. The person requesting to use a different procedure or methodology shall submit the request to the Director along with a description of the different procedure or methodology proposed to be used, an explanation of why the procedure or methodology required by this Rule will not work, and a showing that the proposed procedure or methodology is equivalent to the procedure or methodology being replaced. The Director shall approve the use of this procedure or methodology if he or she finds that one of the conditions identified in 40 CFR Part 51, Appendix P, Section 3.9 exists, that the procedure or methodology required by this Rule will not work, and that the proposed procedure or methodology is equivalent to the procedure or methodology that it will replace.

(h) The owner or operator of the source shall report to the Director no later than 30 days following the end of the quarter the following information:

- (1) for fuel analysis per shipment:
 - (A) the quantity and type of fuels burned;
 - (B) the Btu value;
 - (C) the sulfur content in percent by weight; and
 - (D) the calculated sulfur dioxide emission rates expressed in the same units as the applicable standard.
- (2) for continuous monitoring of emissions:
 - (A) the daily calculated sulfur dioxide emission rates expressed in the same units as the applicable standard for each day; and
 - (B) other information required by Appendix P of 40 CFR Part 51.
 - (i) The owner or operator of the source shall conduct a daily zero and span check of the continuous emission monitoring system, following the manufacturer's recommendations, and shall comply with the requirements of 15A NCAC 02D .0613.

(j) If emission testing for compliance with the sulfur dioxide emission standard is required, the testing shall be done according to 40 CFR Part 60, Appendix A, Method 6, 6C, or other approved methods in 15A NCAC 02D .2600.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4); Eff. June 18, 1976; Amended Eff. June 1, 2008; January 1, 2005; April 1, 2003; April 1, 1999; July 1, 1996; July 1, 1988; July 1, 1984; Readopted Eff. November 1, 2019; Amended Eff. October 1, 2022.