

15A NCAC 02D .1424 LARGE NON-ELECTRIC GENERATING UNITS

(a) General requirements. The owner or operator of a large non-EGU shall comply with the monitoring, recordkeeping and reporting requirements in 15A NCAC 02D .0600, with the exception of .0604 and .0612. For a period of five years, the owner or operator shall maintain all records necessary for determining compliance with all applicable limitations and standards of this Section.

(b) The owner or operator of a large non-EGU covered by this Rule may request alternative monitoring procedures if the source is not required by 15A NCAC 02D .1418 or any other federal regulation to comply with 40 CFR Part 75.

(c) For a source subject to 40 CFR Part 60 Subpart D or Subpart Db, the source shall determine NO_x mass emissions using the NO_x emission rate, total heat input derived, and time interval from each type of fuel during the NO_x SIP Call control period.

(d) For a large non-EGU requesting an alternative monitoring procedure, one of the following monitoring options shall be used to determine NO_x emissions.

- (1) For sources with at least five years of historical CEMS operational data, the NO_x mass emissions shall be determined using the following formula:

$$M = K * C * Q * t / 2000$$

where;

M is the NO_x mass emissions in tons;

K is the conversion constant equal to 1.194E-7 pounds per standard cubic feet-parts per million volume (lb/scf-ppmv);

C is the average NO_x concentration of the unit as demonstrated by previous 40 CFR Part 75 monitoring in parts per million volume (ppmv);

Q is the average flow rate of the unit under normal operating conditions as demonstrated by previous 40 CFR Part 75 monitoring in standard cubic feet per hour (scf/hr);

t is the total operating time in hours during the ozone season; and

2000 pounds per ton (2000 lb/ton).

- (2) For sources with at least five years of historical CEMS emissions data, the NO_x mass emissions shall be determined as follows:

$$M = R * HI * t / 2000$$

where;

M is the NO_x mass emissions in tons,

R is the average NO_x mass emission rate in pounds per million Btu (lb/MMBtu),

HI is the average heat input rate per hour in million British thermal units per hour (MMBtu/hr),

t is the operating time in hours during ozone season, and

2000 pounds per ton (2000 lb/ton).

- (3) For sources without historical CEMS operational data or the CEMS data do not represent current operating conditions, the large non-EGU source shall test utilizing 40 CFR Part 60, Appendix A, Methods 1-4 and 7 or 7e to determine initial NO_x concentration and flow rate factors prior to the ozone season.

(A) The NO_x concentration and flow rate factors determined from the testing and the number of hours operated during the ozone season will be used to determine NO_x emissions for that ozone season.

(B) After a total of three years of testing, the source shall use the average NO_x concentration and flow rate factors for subsequent ozone season NO_x emissions reporting.

(C) Sources shall use the equation in Subparagraph (1) of this Paragraph to calculate their NO_x mass emissions in tons.

(e) A stack test shall be performed periodically in accordance with 40 CFR 51.121(i)(2) to verify NO_x concentration and flow factors for use in computing NO_x mass emissions.

(f) If the approved alternative monitoring or reporting requirements differ from those specified in a corresponding rule in Subchapters 02D or 02Q of this Chapter, the permit shall contain conditions stating the monitoring or reporting requirements.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143.215.107(a)(5); 143.215.107(a)(7); 143.215.107(a)(10);
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