

**15A NCAC 02D .0407 NITROGEN DIOXIDE**

- (a) The primary annual ambient air quality standard for oxides of nitrogen shall be 53 parts per billion annual average concentration measured in the ambient air as nitrogen dioxide.
- (b) The primary one-hour ambient air quality standard for oxides of nitrogen shall be 100 parts per billion one hour annual average concentration measured in the ambient air as nitrogen dioxide.
- (c) The secondary ambient air quality standard for nitrogen dioxide shall be 0.053 parts per million (100 micrograms per cubic meter) annual arithmetic mean concentration.
- (d) Sampling and analysis shall be in accordance with:
  - (1) procedures in Appendix F of 40 CFR Part 50; or
  - (2) by a Federal Equivalent Method (FEM) designated in accordance with 40 CFR Part 53.
- (e) The annual primary standard shall be deemed attained when the annual average concentration in a calendar year is less than or equal to 53 parts per billion, as determined in accordance with Appendix S of 40 CFR Part 50 for the annual standard.
- (f) The one hour primary standard shall be deemed attained when the three-year average of the annual 98th percentile of the daily maximum one-hour average concentration is less than or equal to 100 ppb, as determined in accordance with Appendix S of 40 CFR Part 50 for one-hour standard.
- (g) The secondary standard shall be deemed attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 parts per million, rounded to three decimal places (fractional parts equal to or greater than 0.0005 parts per million are rounded up). To demonstrate attainment, an annual mean shall be based on hourly data that are at least 75 percent complete or on data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter.

*History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(3);  
Eff. February 1, 1976;  
Amended Eff. September 1, 2011; October 1, 1989; July 1, 1984; December 1, 1976;  
Readopted Eff. January 1, 2018.