## **Question 13.14**

**Topic:** Reporting -- Diluent Cap

**Question:** Appendix F of Part 75 allows me to calculate NO<sub>x</sub> emission rate in lb/mmBtu using a "diluent cap", value whenever the CO<sub>2</sub> or O<sub>2</sub> concentration is at or near ambient air levels (e.g., during unit startup and shutdown). When the diluent cap is used to calculate the NO<sub>x</sub> emission rate, should I also use the cap value to calculate heat input and CO<sub>2</sub> mass emissions?

Answer: No. Revisions to Part 75 were published on January 24, 2008, restricting the use of the diluent cap to the calculation of NO<sub>x</sub> emission rate, and only for hours in which a quality-assured diluent gas reading is obtained, showing that use of the cap value is justified (see 73 FR 4333-34, January 24, 2008). For every hour in which the diluent cap is used to calculate the NO<sub>x</sub> emission rate, you must use the quality-assured CO<sub>2</sub> or O<sub>2</sub> value for that hour to calculate CO<sub>2</sub> mass emissions and heat input.

**References:** Appendix F, Section 3.3.4.1

**History:** First published in November 1995, Update #7; revised in October 1999 Revised Manual; revised in 2013 Manual