

## Question 19.18

**Topic:** Moisture Basis of Primary and RM Backup Monitors

**Question:** For the wet and dry-basis primary and RM backup SO<sub>2</sub> monitors described in the previous Question, does reporting SO<sub>2</sub> concentration data on two different moisture bases affect the precision of the SO<sub>2</sub> missing data substitution values?

**Answer:** Yes, but the effect is considered to be minimal. The maximum amount of additional imprecision introduced into the 90th and 95th percentile substitution values by the occasional use of backup RM monitors is conservatively estimated to be about one percent, assuming that ten percent of the "look-back" values are RM readings, and that the moisture bias of each RM data point is ten percent. Recognizing that missing data values, by nature, are somewhat imprecise, this slight additional loss in accuracy is outweighed by the benefits of achieving consistency in Part 75 data reporting.

**References:** § 75.20(d)(3); §§ 75.31-75.37

**History:** First published in March 1995, Update #5; revised in 2013 Manual