

Question 19.6

Topic: Acceptable Calibration Error for RM Backup Monitoring

Question: For Part 75 RM backup gas monitoring systems, how much calibration error is acceptable in the pre-and post-test calibrations?

Answer: For the initial 3-point analyzer calibration error check of a dry extractive monitoring system, Methods 6C, 7E, and 3A allow calibration errors of up to $\pm 2.0\%$ of the calibration span. For pre- and post-run bias checks, the system bias must be within $\pm 5.0\%$ of the calibration span. Alternatively, the results of an analyzer calibration error check or a bias check are acceptable at any calibration gas level if the absolute difference between the reference and measured values does not exceed: 0.5 ppmv SO₂; 0.5 ppmv NO_x; 0.5 percent O₂; or 0.5 percent CO₂ (as applicable).

For the initial 3-point system calibration error check of a dilution system, the calibration error at each point must be within $\pm 2.0\%$ of the calibration span. For the subsequent 2-point system calibration error checks, the system calibration error must be within $\pm 5.0\%$ of the calibration span at each point. Alternatively, the results of a system calibration error check are acceptable at any calibration gas level if the absolute difference between the reference and measured values does not exceed: 0.5 ppmv SO₂; 0.5 ppmv NO_x; 0.5 percent O₂; or 0.5 percent CO₂ (as applicable).

References: § 75.20(d)(3); Method 7E, Sections 13.1 and 13.2, Method 6C, Section 13.1, and Method 3A, Section 13.0

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