

## Question 9.28

**Topic:** Justification for Non-routine Calibration Adjustment

**Question:** What is an acceptable technical justification for a non-routine calibration adjustment? The rule states that such adjustments may be made prior to a RATA or linearity. May they also be made after any daily calibration?

**Answer:** Non-routine adjustments are allowed prior to RATAs and linearities because calibration gases are only guaranteed accurate to within two percent of the tag value. For daily calibrations of dilution-extractive systems, which are very sensitive to ambient conditions, the revised rule allows an adjustment away from the tag value (but still within the performance specification band, e.g.,  $\pm 2.5\%$  of span for SO<sub>2</sub> and NO<sub>x</sub> analyzers, in most cases), when it is justified on technical grounds, such as an anticipated barometric pressure change, and is part of the QA plan for the CEMS. An additional calibration error test must be performed after non-routine adjustments to demonstrate that the analyzer is still operating within its performance specifications.

**References:** Appendix B, Section 2.1.3(c)

**History:** First published in March 2000, Update #12; revised in 2013 Manual