Question 7.11

Topic: Linearity Check Requirements for Non-redundant Backup Systems or a Temporary Like-kind Replacement Analyzer

Question: When must a linearity check of non-redundant backup systems or a temporary like-kind replacement analyzer be performed?

Answer: In general, a linearity check must be passed each time a "regular nonredundant backup monitoring system" or a temporary "like-kind replacement analyzer" is brought into service.

Data from the monitoring system or analyzer are considered invalid until the linearity test is passed, unless a probationary calibration error test is performed and passed when the system or analyzer is brought into service. In that case, data from the system or analyzer may be considered "conditionally valid" for up to168 unit or stack operating hours (beginning at the hour of the probationary calibration error test), provided that a successful linearity test is completed within the 168 operating hour window.

When conditional data validation is used, if the linearity test is passed within the 168 unit or stack operating hour window, then all of the conditionally valid emissions data, from the hour of the probationary calibration error test until the hour of completion of the linearity test, are considered to be quality-assured data, suitable for reporting. However, if, during the 168 hour window, the linearity test is either failed or aborted due to a problem with the monitor, then all of the conditionally valid data recorded up to that point are invalidated. Following corrective actions, the conditionally valid data status may be re-established by performing another probationary calibration error test *provided that* the 168 operating hour window of the original probationary calibration error test (i.e., the one that was performed when the monitor was first brought into service) has not expired. If the original 168 operating hour window expires without a successful linearity check having been completed, then the monitor may not be used for reporting until a linearity test is passed.

If use of the non-redundant backup monitor or temporary like-kind replacement analyzer continues into the next calendar quarter, the monitor or analyzer is subject to the same linearity check requirements as the primary monitor.

References: § 75.20(d)

History: First published in November 1994, Update #4; revised in October 1999 Revised Manual; revised in October 2003 Revised Manual; revised in 2013 Manual