Frequently Asked Questions (FAQs) Performance Specification 8 and 8A

Q. Performance Specification 8 and Performance Specification 8A (VOC and THC CEMS) refer you to Performance Specification 2 for the requirements related to determining the span value and the data recorder output range for a VOC or THC instrument. In Performance Specification 2, you are required to set the span value at a concentration approximately equivalent to two times the emission limit (Section 3.11) and your data recorder (Section 6.1.1) must include the full range of expected concentrations including both the zero and span values. Typically, the instrument span value should encompass the expected range of concentrations to be measured, but how should we approach these requirements for sources that have widely variable concentrations or periodic spikes in concentration tied to typical process conditions which far exceed two times the emission limit?

A. You should follow the requirements for the performance specifications for span value to ensure accuracy near the emission limit. You should also ensure that the data recorder range includes the full range of emissions will be measured. If additional quality assurance is needed to ensure linearity at levels significantly above the span value, we recommend that you challenge the instrument daily using a calibration gas which represents 70-80% of the full range of the analyzer and the mean difference between the measured results and the reference value should be within 10.0 percent of the tag value of the reference gas.