

Question 19.12

Topic: Selection of RM Backup Monitor Sampling Location and Points

Question: How are the sampling site and measurement points selected for Part 75 RM backup gas and flow rate monitoring systems?

Answer: Gas Monitors: Use the following siting and point location guidelines for

Part 75 RM backup monitoring systems:

Sampling Location

The RM sampling site must be selected to ensure representative measurement of the actual emissions discharged to the atmosphere from the unit or stack. Follow the guidelines of Section 6.5.5 of Appendix A to Part 75 (i.e., the sampling location must be: (a) accessible; (b) in the same proximity as the CEMS location; and (c) meet the requirements of Performance Specification 2 (PS 2) in Appendix B to Part 60).

Sampling Point(s)

Follow the guidelines of Section 6.5.6 of Appendix A to Part 75 (i.e., the RM sampling point(s) must: (a) ensure that representative concentration measurements are obtained; and (b) meet the requirements of PS 2). To achieve this, the tester has the following options:

(1) Use three traverse points per test run, located in accordance with Section 8.1.3.2 of PS 2, and sample for an equal amount of time at each point; or

(2) Use a single, representative sampling point that meets the location criteria in (a) or (b), below:

(a) The selected point is acceptable if located within 30 cm of the measurement point of an installed, certified Part 75 gas monitoring system. (The RM probe may be located up to 2 feet above or below the plane of measurement of the installed CEMS; however, when the RM probe is projected onto the CEMS measurement plane, the CEM and RM sample points must be separated by 30 centimeters or less.)

(b) The selected point is acceptable if it is no less than 1.0 meters from the stack wall and is demonstrated to be representative of the source emissions by means of a 12-point stratification test for the pollutant(s) to be monitored. Conduct the stratification test in accordance with Section 6.5.6.1 of Appendix A to Part 75. In order for the selected point to be suitable for RM backup monitoring, the point must meet the acceptance criteria in Section 6.5.6.3(b) of Appendix A.

Flow Monitors: The sampling site and measurement point locations must

conform to the requirements of EPA Reference Methods 1 and 2.

References: § 75.20(d)(3); Part 75, Appendix A, Sections 6.5.5 and 6.5.6; 40 CFR 60, Appendix B, Performance Specification 2

History: First published in March 1995, Update #5; revised in October 1999 Revised Manual; revised in October 2003 Revised Manual; revised in 2013 Manual