Question 7.1

Topic: Portable Gas Analyzers

Question: Can portable gas analyzers be used as backup or temporary replacement monitors at multiple locations? Describe what constraints or limitations may apply.

Answer: There are two ways that portable gas analyzers may be used as backup or temporary replacement monitors at multiple unit or stack locations:

> (1) The portable analyzers may be operated as reference method backup monitoring systems (i.e., operated according to EPA Method 3A, 6C, or 7E). Detailed guidance on the use of reference method backup monitors is given in Section 19 of this Policy Manual; or
> (2) The analyzers may be used either as "regular non-redundant backup monitoring systems" or as temporary "like-kind replacement analyzers" (see § 75.20(d)).

A "regular non-redundant backup monitoring system" uses a different probe and sample interface from the primary monitoring system. Regular non-redundant backup monitoring systems must be certified at each location where they will be used. All certification tests in § 75.20(c) are required, except for the 7-day calibration error test.
If the portable analyzers qualify as "like-kind replacement analyzers" (see Question 7.13), you may use them on a short-term basis (e.g., when maintenance is being performed on the primary analyzers), by connecting them to the same probe and interface as the primary gas monitors. Initial certification of a temporary like-kind replacement analyzer is not required. For both regular non-redundant backup monitoring systems and temporary like-kind replacement analyzers, a linearity check is required each time that the backup system or replacement analyzer is brought into service. Regular non-redundant backup monitoring systems must be identified in the electronic monitoring plan required under § 75.53 as separate monitoring systems with unique system ID numbers.

In each quarter that a temporary like-kind replacement analyzer is used for data reporting, it must be represented in the electronic monitoring plan as a component of the primary monitoring system, and must be assigned a component ID that begins with the letters "LK" (e.g., "LK3"). Hourly data from the like-kind replacement analyzer are reported under the primary monitoring system ID number, and a method of determination code (MODC) of "17" must be reported. Part 75 allows manual entry of both the component ID and the MODC for temporary like-kind replacement analyzers.

The use of regular non-redundant backup monitoring systems or temporary like-kind replacement analyzers is limited to 720 hours per year per parameter (i.e., 720 hours each for SO_2, NO_x, CO_2, or O_2) at each unit or stack location. To use a regular non-redundant backup monitoring system more than 720 hours per year at any location, a RATA is required.

To use a temporary like-kind replacement analyzer more than 720 hours per year at a particular unit or stack location, the monitoring plan must be updated, redesignating the analyzer as a component of a regular nonredundant backup system, and a RATA must be passed at that unit or stack location.

References: § 75.20(d)

History: First published in Original March 1993 Policy Manual; revised in October 1999 Revised Manual; revised in October 2003 Revised Manual; revised in 2013 Manual