§ 63.546  Compliance dates.

(a) For affected sources that commenced construction or reconstruction on or before May 19, 2011, you must demonstrate compliance with the requirements of this subpart no later than January 6, 2014.

(b) For affected sources that commenced construction or reconstruction after May 19, 2011, you must demonstrate compliance with the requirements of this subpart by January 5, 2012 or upon startup of operations, whichever is later.

§ 63.547  Test methods.

(a) You must use the test methods from appendix A of part 60 as listed in paragraphs (a)(1) through (5) of this section to determine compliance with the emissions standards for lead compounds specified in §63.543(a) and (b).

(1) EPA Method 1 at 40 CFR part 60, appendix A-1 to select the sampling port location and the number of traverse points.

(2) EPA Method 2 at 40 CFR part 60, appendix A-1 or EPA Method 5D at 40 CFR part 60, appendix A-3, section 8.3 for positive pressure fabric filters, to measure volumetric flow rate.

(3) EPA Method 3, 3A, or 3B at 40 CFR part 60, appendix A-2 to determine the dry molecular weight of the stack gas.

(4) EPA Method 4 at 40 CFR part 60, appendix A-3 to determine moisture content of the stack gas.

(5) EPA Method 12 or Method 29 at 40 CFR part 60, appendix A-8 to determine compliance with the lead compound emissions standards. The minimum sample volume must be 2.0 dry standard cubic meters (70 dry standard cubic feet) for each run. You must perform three test runs and you must determine compliance using the average of the three runs.

(b) You must use the following test methods in appendix A of part 60 listed in paragraphs (b)(1) through (4) of this section, as specified, to determine compliance with the emissions standards for total hydrocarbons specified in §63.543(c) through (f).

(1) EPA Method 1 at 40 CFR part 60, appendix A-1 to select the sampling port location and number of traverse points.

(2) The Single Point Integrated Sampling and Analytical Procedure of Method 3B to measure the carbon dioxide content of the stack gases when using either EPA Method 3A or 3B at 40 CFR part 60, appendix A-2.

(3) EPA Method 4 at 40 CFR part 60, appendix A-3 to measure moisture content of the stack gases.

(4) EPA Method 25A at 40 CFR part 60, appendix A-7 to measure total hydrocarbons emissions. The minimum sampling time must be 1 hour for each run. You must perform a minimum of three test runs. You must calculate a 1-hour average total hydrocarbons concentration for each run and use the average of the three 1-hour averages to determine compliance.

(c) You must correct the measured total hydrocarbons concentrations to 4 percent carbon dioxide as specified in paragraphs (c)(1) through (3) of this section.

(1) If the measured percent carbon dioxide is greater than 0.4 percent in each compliance test, you must determine the correction factor using Equation 2 of this section.

\[
F = \frac{4.0}{CO_2}
\]

(Eq. 2)

Where:
F = Correction factor (no units).

CO₂ = Percent carbon dioxide measured using EPA Method 3A or 3B at 40 CFR part 60.
appendix A–2, where the measured carbon dioxide is greater than 0.4 percent.

(2) If the measured percent carbon dioxide is equal to or less than 0.4 percent, you must use a correction factor (F) of 10.

(3) You must determine the corrected total hydrocarbons concentration by multiplying the measured total hydrocarbons concentration by the correction factor (F) determined for each compliance test.

(d) You must use the following test methods in appendix A of part 60 listed in paragraphs (d)(1) through (5) of this section, as specified, to determine compliance with the emissions standards for dioxins and furans specified in §63.543(c).

(1) EPA Method 1 at 40 CFR part 60, appendix A–1 to select the sampling port location and the number of traverse points.

(2) EPA Method 2 at 40 CFR part 60, appendix A–1 or EPA Method 5D at 40 CFR part 60, appendix A–3, section 8.3 for positive pressure fabric filters to measure volumetric flow rate.

(3) EPA Method 3A or 3B at 40 CFR part 60, appendix A–2 to determine the oxygen and carbon dioxide concentrations of the stack gas.

(4) EPA Method 4 at 40 CFR part 60, appendix A–3 to determine moisture content of the stack gas.

(5) EPA Method 23 at 40 CFR part 60, appendix A–7 to determine the dioxins and furans concentration.

(e) You must determine the dioxins and furans toxic equivalency by following the procedures in paragraphs (e)(1) through (3) of this section.

(1) Measure the concentration of each dioxins and furans congener shown in Table 3 of this subpart using EPA Method 23 at 40 CFR part 60, appendix A–7. You must correct the concentration of dioxins and furans in terms of toxic equivalency to 7 percent O\textsubscript{2} using Equation 3 of this section.

\[
C_{adj} = \frac{C_{meas}(20.9 - 7)}{(20.9 - \%O_2)}
\]  

(Eq. 3)

Where:

\(C_{adj}\) = Dioxins and furans concentration adjusted to 7 percent oxygen.

\(C_{meas}\) = Dioxins and furans concentration measured in nanograms per dry standard cubic meter.

\((20.9 - 7)\) = 20.9 percent oxygen−7 percent oxygen (defined oxygen correction basis).

\(20.9\) = Oxygen concentration in air, percent.

\(\%O_2\) = Oxygen concentration measured on a dry basis, percent.

(2) For each dioxins and furans congener measured as specified in paragraph (e)(1) of this section, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 3 to this subpart.

(3) Sum the values calculated as specified in paragraph (e)(2) of this section to obtain the total concentration of dioxins and furans emitted in terms of toxic equivalency.

§ 63.548 Monitoring requirements.

(a) You must prepare, and at all times operate according to, a standard operating procedures manual that describes in detail procedures for inspection, maintenance, and bag leak detection and corrective action plans for all baghouses (fabric filters or cartridge filters) that are used to control process vents, process fugitive, or fugitive dust emissions from any source subject to the lead emissions standards in §§63.543, 63.544, and 63.545, including those used to control emissions from building ventilation.

(b) You must submit the standard operating procedures manual for baghouses required by paragraph (a) of this section to the Administrator or delegated authority for review and approval.

(c) The procedures that you specify in the standard operating procedures manual for inspections and routine