(ii) Performing maintenance inside a temporary enclosure and use a vacuum system either equipped with a filter rated by the manufacturer to achieve a capture efficiency of 99.97 percent for 0.3 micron particles or routed to an existing control device permitted for this activity.

(iii) Performing maintenance inside a partial enclosure and use of wet suppression sufficient to prevent dust formation.

(iv) Decontamination of equipment prior to removal from an enclosure.

(v) Immediate repair of ductwork or structure leaks without an enclosure if the time to construct a temporary enclosure would exceed the time to make a temporary or permanent repair, or if construction of an enclosure would cause a higher level of emissions than if an enclosure were not constructed.

(vi) Activities required for inspection of fabric filters and maintenance of filters that are in need of removal and replacement are not required to be conducted inside of total enclosures. Used fabric filters must be placed in sealed plastic bags or containers prior to removal from a baghouse.

(7) Material transport. You must collect and transport all lead bearing dust (i.e. lead bearing material which is a dust) within closed conveyor systems or in sealed, leak-proof containers unless the collection and transport activities are contained within a total enclosure. All other lead bearing material must be contained and covered for transport outside of a total enclosure in a manner that prevents spillage or dust formation. Intact batteries and lead ingot product are exempt from the requirement to be covered for transport.

(d) Your standard operating procedures manual must specify that records be maintained of all pavement cleaning, vehicle washing, and battery storage inspection activities performed to control fugitive dust emissions.

(e) You must pave all grounds on the facility or plant groundcover sufficient to prevent wind-blown dust. You may use dust suppressants on unpaved areas that will not support a groundcover (e.g., roadway shoulders, steep slopes, limited access and limited use roadways).

(f) As provided in §63.6(g), as an alternative to the requirements specified in this section, you can demonstrate to the Administrator (or delegated State, local, or Tribal authority) that an alternative measure(s) is equivalent or better than a practice(s) described in this section.

§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.

(c) Until the date specified in §63.546(a), secondary lead smelters that commenced construction or reconstruction on or before May 19, 2011, must continue to demonstrate compliance with the requirements of this subpart, codified in 40 CFR 63.541 through 40 CFR 63.550, that were in effect prior to the January 5, 2012, amendments. This means that secondary lead smelters that commenced construction or reconstruction on or before June 9, 1994, must continue to demonstrate compliance with existing source requirements of this subpart that were in effect prior to the January 5, 2012, amendments until the date specified in §63.546(a). Secondary lead smelters that commenced construction or reconstruction after June 9, 1994, and on or before May 19, 2011, must continue to demonstrate compliance with new source requirements of this subpart that were in effect prior to the January 5, 2012, amendments until the date specified in §63.546(a).

§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.

\[ F = \frac{C_0}{C_0 + 10 \times C} \]

Where:

- \( F \) = Correction factor (no units).
- \( C_0 \) = 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 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 \( \text{O}_2 \) using Equation 3 of this section.

\[
C_{adj} = \frac{C_{meas}}{20.9 - \% \text{O}_2} \times 20.9
\]

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.
- \( 20.9 - \% \text{O}_2 \) = 20.9 percent oxygen—7 percent oxygen (defined oxygen correction basis).
- \( 20.9 \) = Oxygen concentration in air, percent.
- \( \% \text{O}_2 \) = 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 maintenance must, at a minimum, include the requirements of paragraphs (c)(1) through (9) of this section.

1. Daily monitoring of pressure drop across each baghouse cell.

2. Weekly confirmation that dust is being removed from hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms.

3. Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

4. An appropriate methodology for monitoring cleaning cycles to ensure proper operation.

5. Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means.

6. Monthly check of bag tension on reverse air and shaker-type baghouses. Such checks are not required for shaker-type baghouses using self-tensioning (spring loaded) devices.

7. Quarterly confirmation of the physical integrity of the baghouse through visual inspection of the baghouse interior for air leaks.

8. Quarterly inspection of fans for wear, material buildup, and corrosion.