§ 63.5746 How do I demonstrate compliance with the emission limits for aluminum wipedown solvents and aluminum coatings?

To demonstrate compliance with the emission limits for aluminum wipedown solvents and aluminum coatings specified in §63.5743(a), you must meet the requirements of paragraphs (a) through (f) of this section.

(a) Determine and record the organic HAP content (kilograms of organic HAP per kilogram of material, or weight fraction) of each aluminum wipedown solvent and aluminum coating (including primers, topcoats, clear coats, thinners, and activators). Use the methods in §63.5758 to determine organic HAP content.

(b) Use the methods in §63.5758(b) to determine the solids content (liters of solids per liter of coating, or volume fraction) of each aluminum surface coating, including primers, topcoats, and clear coats. Keep records of the solids content.

(c) Use the methods in §63.5758(c) to determine the density of each aluminum surface coating and wipedown solvent.

(d) Compliance is based on a 12-month rolling average calculated at the end of every month. The first 12-month rolling-average period begins on the compliance date specified in §63.5695.

(e) At the end of the twelfth month after your compliance date and at the end of every subsequent month, use the procedures in §63.5749 to calculate the organic HAP from aluminum wipedown solvents per liter of coating solids, and use the procedures in §63.5752 to calculate the kilograms of organic HAP from aluminum coatings per liter of coating solids.

(f) Keep records of the calculations used to determine compliance.

(g) Approval of alternative means of demonstrating compliance. You may apply to the Administrator for permission to use an alternative means (such as an add-on control system) of limiting emissions from aluminum wipedown solvent and coating operations and demonstrating compliance with the emission limits in §63.5743(a).

(1) The application must include the information listed in paragraphs (g)(1)(i) through (iii) of this section.

(ii) An engineering evaluation that compares the emissions using the alternative means to the emissions that would result from using the strategy specified in paragraphs (a) through (e) of this section. The engineering evaluation may include the results from an emission test that accurately measures the capture efficiency and control device efficiency achieved by the control system and the composition of the associated coatings so that the emissions comparison can be made.

(iii) Details of appropriate record-keeping and reporting procedures.

(2) The Administrator will approve the alternative means of limiting emissions if the Administrator determines that HAP emissions will be no greater than if the source uses the procedures described in paragraphs (a) through (e) of this section to demonstrate compliance.

(3) The Administrator’s approval may specify operation, maintenance, and monitoring requirements to ensure that emissions from the regulated operations are no greater than those that would otherwise result from regulated operations in compliance with this subpart.

§ 63.5749 How do I calculate the organic HAP content of aluminum wipedown solvents?

(a) Use equation 1 of this section to calculate the weighted-average organic HAP content of aluminum wipedown solvents used in the past 12 months.
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HAP_{WD} = \frac{\sum_{j=1}^{n} (Vol_j)(D_j)(W_j)}{\sum_{i=1}^{m} (Vol_i)(Solids_i)} \quad \text{(Eq. 1)}

Where:

- HAP_{WD} = weighted-average organic HAP content of aluminum wipedown solvents, kilograms of HAP per liter of total coating solids from aluminum primers, top coats, and clear coats.
- n = number of different wipedown solvents used in the past 12 months.
- Vol_j = volume of aluminum wipedown solvent j used in the past 12 months, liters.
- D_j = density of aluminum wipedown solvent j, kilograms per liter.
- W_j = mass fraction of organic HAP in aluminum wipedown solvent j.
- m = number of different aluminum surface coatings (primers, top coats, and clear coats) used in the past 12 months.

Vol_i = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.
Solids_i = solids content aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 0.33 kilograms of organic HAP per liter of total coating solids, then you are in compliance with the emission limit specified in §63.5743(a)(1).

§63.5753 How do I calculate the combined organic HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings?

(a) Use equation 1 of this section to calculate the combined weighted-average HAP content for all aluminum surface coatings used in the past 12 months.

\[ HAP_{SC} = \frac{\sum_{i=1}^{m} (Vol_i)(D_i)(W_i) + \sum_{k=1}^{p} (Vol_k)(D_k)(W_k)}{\sum_{i=1}^{m} (Vol_i)(Solids_i)} \quad \text{(Eq. 1)} \]

Where:

- HAP_{SC} = weighted-average organic HAP content for all aluminum coating materials, kilograms of organic HAP per liter of coating solids.
- m = number of different aluminum primers, top coats, and clear coats used in the past 12 months.
- Vol_i = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.
- D_i = density of coating i, kilograms per liter.
- W_i = mass fraction of organic HAP in coating i, kilograms of organic HAP per kilogram of coating.
- p = number of different thinners, activators, and other coating additives used in the past 12 months.
- Vol_k = total volume of thinner, activator, or additive k used in the past 12 months, liters.
- D_k = density of thinner, activator, or additive k, kilograms per liter.
- W_k = mass fraction of organic HAP in thinner, activator, or additive k, kilograms of organic HAP per kilogram of thinner or activator.
- Solids_i = solids content aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 1.22 kilograms of organic HAP per liter of coating solids, then you are in compliance with the emission limit specified in §63.5743(a)(2).

§63.5752 How do I calculate the organic HAP content of aluminum recreational boat surface coatings?

(a) Use equation 1 of this section to calculate the weighted-average HAP content for all aluminum surface coatings used in the past 12 months.

Vol_i = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.
Solids_i = solids content aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 0.33 kilograms of organic HAP per liter of total coating solids, then you are in compliance with the emission limit specified in §63.5743(a)(1).