

Environmental Protection Agency

§ 63.4142

(3) *Calculation of volume fraction of coating solids.* If the volume fraction of coating solids cannot be determined using the options in paragraphs (b)(1) and (2) of this section, you must determine it using Equation 1 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Eq. 1})$$

Where:

V_s = volume fraction of coating solids, liters coating solids per liter coating.

$m_{\text{volatiles}}$ = total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

D_{avg} = average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see § 63.14) information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 test results and other information sources, the test results will take precedence.

(c) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 test results and other information sources, the test results will take precedence.

(d) Determine the organic HAP content of each coating. Determine the organic HAP content, kg organic HAP per liter coating solids, of each coating used during the compliance period, using Equation 2 of this section, except that if the mass fraction of organic HAP equals zero, then the organic HAP content also equals zero and you are not required to use Equation 2 to calculate the organic HAP content:

$$H_c = (D_c)(W_c) / V_s \quad (\text{Eq. 2})$$

Where:

H_c = organic HAP content of the coating, kg organic HAP per liter coating solids.

D_c = density of coating, kg coating per liter coating, determined according to paragraph (c) of this section.

W_c = mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

V_s = volume fraction of coating solids, liters coating solids per liter coating, determined according to paragraph (b) of this section.

(e) The organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in § 63.4090; and each thinner and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§ 63.4130 and 63.4131. As part of the Notification of Compliance Status required in § 63.4110, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeds the applicable emission limit in § 63.4090, and you used no thinners or cleaning materials that contain organic HAP, determined according to paragraph (a) of this section.

§ 63.4142 How do I demonstrate continuous compliance with the emission limitations?

(a) For each compliance period, to demonstrate continuous compliance, you must use no coating for which the organic HAP content, determined according to § 63.4141(d), exceeds the applicable emission limit in § 63.4090, and use no thinner or cleaning material that contains organic HAP, determined according to § 63.4141(a). Each month following the initial compliance period described in § 63.4140 is a compliance period.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any

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coating, thinner, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§ 63.4110(b)(6) and 63.4120(d).

(c) As part of each semiannual compliance report required by § 63.4120, you must submit a statement that you were in compliance with the emission limitations during the reporting period because you used no thinners or cleaning materials that contained organic HAP, and you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.4090.

(d) You must maintain records as specified in §§ 63.4130 and 63.4131.

COMPLIANCE REQUIREMENTS FOR THE EMISSION RATE WITHOUT ADD-ON CONTROLS OPTION

§ 63.4150 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.4151. The initial compliance period begins on the applicable compliance date specified in § 63.4083 and ends on the last day of the first full month after the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month. The initial compliance demonstration includes the calculations according to § 63.4151 and supporting documentation showing that the organic HAP emission rate for the initial compliance period was equal to or less than the applicable emission limit in § 63.4090.

§ 63.4151 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating oper-

ation(s) in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation(s) must meet the applicable emission limit in § 63.4090 but not the operating limits or work practice standards in §§ 63.4092 and 63.4093, respectively, during the initial compliance period. You must meet all of the requirements of this section to demonstrate initial compliance with the applicable emission limit in § 63.4090 for the coating operation(s). When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to re-determine the mass of organic HAP in coatings, thinners, or cleaning materials that have been reclaimed onsite and reused in the coating operation(s) for which you use the emission rate without add-on controls option.

(a) *Determine the mass fraction of organic HAP for each material.* Determine the mass fraction of organic HAP for each coating, thinner, and cleaning material used during the compliance period according to the requirements in § 63.4141(a).

(b) *Determine the volume fraction of coating solids for each coating.* Determine the volume fraction of coating solids for each coating used during the compliance period according to the requirements in § 63.4141(b).

(c) *Determine the density of each material.* Determine the density of each coating, thinner, and cleaning material used during the compliance period according to the requirements in § 63.4141(c).

(d) *Determine the volume of each material used during the compliance period.* Determine the volume (liters) of each coating, thinner, and cleaning material used during the compliance period by measurement or usage records.

(e) *Calculate the mass of organic HAP emissions during the compliance period.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners, and cleaning materials used during the