

Where:

H_{CSR} = mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg.

A_{CSR} = total mass of organic HAP in the coatings used in the coating

operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section.

B_{CSR} = total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.

R_v = volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 3A of this section.

$$A_{CSR} = \sum_{i=1}^m (\text{Vol}_{c,i}) (D_{c,i}) (W_{c,i}) \quad (\text{Eq. 3A})$$

Where:

A_{CSR} = total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.

$\text{Vol}_{c,i}$ = total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{c,i}$ = density of coating, i, kg per liter.

$W_{c,i}$ = mass fraction of organic HAP in coating, i, kg per kg.

m = number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system, using Equation 3B of this section.

$$B_{CSR} = \sum_{j=1}^n (\text{Vol}_{t,j}) (D_{t,j}) (W_{t,j}) \quad (\text{Eq. 3B})$$

Where:

B_{CSR} = total mass of organic HAP in the thinners used in the coating operation controlled by the solvent recovery system during the month, kg.

$\text{Vol}_{t,j}$ = total volume of thinner, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{t,j}$ = density of thinner, j, kg per liter.

$W_{t,j}$ = mass fraction of organic HAP in thinner, j, kg per kg.

n = number of different thinners used.

(k) Calculate the total volume of coating solids used. Determine the total volume of coating solids used which is the combined volume of coating solids for all the coatings used during each month in the coating operation or group

of coating operations for which you use the emission rate with add-on controls option, using Equation 2 of § 63.3551.

(l) Calculate the mass of organic HAP emissions for each month. Determine the mass of organic HAP emissions during each month, using Equation 4 of this section.

$$H_{HAP} = H_e - \sum_{i=1}^q (H_{c,i}) - \sum_{j=1}^r (H_{CSR,j}) \quad (\text{Eq. 4})$$

Where:

H_{HAP} = total mass of organic HAP emissions for the month, kg.

H_e = total mass of organic HAP emissions before add-on controls from all the coatings and thinners used during the month, kg, determined according to paragraph (f) of this section.

$H_{c,i}$ = total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.

$H_{CSR,j}$ = total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of this section.

q = number of controlled coating operations not using a liquid-liquid material balance.

r = number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) Calculate the organic HAP emission rate for the 12-month compliance period. Determine the organic HAP emission rate for the 12-month compliance period, kg organic HAP per liter coating solids used, using Equation 5 of this section.

$$H_{\text{annual}} = \frac{\sum_{y=1}^{12} H_{HAP,y}}{\sum_{y=1}^{12} V_{st,y}} \quad (\text{Eq. 5})$$

Where:

H_{annual} = organic HAP emission rate for the 12-month compliance period, kg organic HAP per liter coating solids.

$H_{HAP,y}$ = organic HAP emission rate for month, y, determined according to Equation 4 of this section.

$V_{st,y}$ = total volume of coating solids used during month, y, liters, from Equation 2 of § 63.3551.

y = identifier for months.

(n) Compliance demonstration. To demonstrate initial compliance with the emission limit, the organic HAP emission rate, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit in § 63.3490. You must keep all records as required by §§ 63.3530 and 63.3531. As part of the Notification of Compliance Status required by § 63.3510, you must identify the coating operation(s) for which you used the emission rate with