

coating/printing operation(s) during the compliance period, kg, using Equation 1A of this section:

$$A_I = \sum_{i=1}^m (M_{c,i}) (W_{c,i}) \quad (\text{Eq. 1A})$$

Where:

A_I = Total mass of organic HAP in the coating and printing materials applied in the controlled web coating/printing operation(s) during the compliance period, kg.

$M_{c,i}$ = Mass of coating or printing material, i, applied during the compliance period, kg.

$W_{c,i}$ = Mass fraction of organic HAP in coating or printing material, i, kg per kg.

m = Number of different coating and printing materials applied during compliance period.

(ii) Calculate the total mass of organic HAP in the thinning and cleaning materials applied in the controlled web coating/printing operation(s) during the compliance period, kg, using Equation 1B of this section:

$$B_I = \sum_{j=1}^n (M_{t,j}) (W_{t,j}) \quad (\text{Eq. 1B})$$

Where:

B_I = Total mass of organic HAP in the thinning and cleaning materials applied in the controlled web coating/printing operation(s) during the compliance period, kg.

$M_{t,j}$ = Total mass of thinning or cleaning material, j, applied during the compliance period, kg.

$W_{t,j}$ = Mass fraction of organic HAP in thinning or cleaning material, j, kg per kg.

n = Number of different thinning and cleaning materials applied during the compliance period.

(iii) Calculate the mass of organic HAP in the coating, printing, thinning, and cleaning materials applied in the controlled web coating/printing

operation during deviations specified in § 63.4342(c) and (d), using Equation 1C of this section.

$$H_{\text{UNC}} = \sum_{h=1}^q (M_h) (W_h) \quad (\text{Eq. 1C})$$

Where:

H_{UNC} = Total mass of organic HAP in the coating, printing, thinning, and cleaning materials applied during all deviations specified in § 63.4342 (c) and (d) that occurred during the compliance period in the controlled web coating/printing operation, kg.

M_h = Total mass of coating, printing, thinning, or cleaning material, h, applied in the controlled web coating/printing operation during deviations, kg.

W_h = Mass fraction of organic HAP in coating, printing, thinning, or cleaning material, h, kg organic HAP per kg material.

q = Number of different coating, printing, thinning, and cleaning materials applied and used.

(5) *Calculate the organic HAP emissions reductions for controlled web coating/printing operation using liquid-liquid material balances.* For each controlled web coating/printing operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emissions reductions by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coating, printing, thinning, and cleaning materials applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period. Perform a liquid-liquid material balance for the compliance period as specified in paragraphs (e)(5)(i) through (v) of this section. Calculate the mass of organic HAP emissions reductions by the solvent recovery system as specified in paragraph (e)(5)(vi) of this section.

(i) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system for the compliance period. The device must be initially certified by the manufacturer to be accurate to within ± 2.0 percent of the mass of volatile organic matter recovered.

(ii) For each solvent recovery system, determine the mass of volatile organic matter recovered for the compliance period, kg, based on measurement with the device required in paragraph (e)(5)(i) of this section.

(iii) Determine the mass fraction of volatile organic matter for each coating, printing, cleaning, and thinning material applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg volatile organic matter per kg coating, printing, cleaning, and thinning material. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or you may use information provided by the manufacturer or supplier of the coating or printing material. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will govern.

(iv) Measure the mass of each coating, printing, thinning, and cleaning material applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg.

(v) For the compliance period, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency using Equation 2 of this section:

$$R_V = 100 \frac{M_{\text{VR}}}{\sum_{i=1}^m M_i W_{V,c,i} + \sum_{j=1}^n M_j W_{V,t,j}} \quad (\text{Eq. 2})$$

Where:

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the compliance period, percent.

M_{VR} = Mass of volatile organic matter recovered by the solvent recovery

system during the compliance period, kg.

M_i = Mass of coating or printing material, i, applied in the web coating/printing operation controlled by the solvent recovery system during the compliance period, kg.

$W_{V,c,i}$ = Mass fraction of volatile organic matter for coating or printing material, i, kg volatile organic matter per kg coating or printing material.

M_j = Mass of thinning or cleaning material, j, applied in the web coating/printing operation controlled by the solvent recovery