

To demonstrate initial compliance based on the materials used, you are required to either ensure that the organic HAP content of each coating meets the emission limit and that you use no organic HAP-containing thinners or cleaning materials; or ensure that the total mass of organic HAP in all coatings, thinners, and cleaning materials divided by the total volume of coating solids meets the emission limit. For the latter option, you are required to:

- For the initial compliance period, determine the quantity of each coating, thinner, and cleaning material used in the affected source.

- Determine the mass of organic HAP in each coating, thinner, and cleaning material.

- Determine the volume fraction coating solids for each coating.

- Calculate the total mass of organic HAP for materials and total volume of coating solids used in the affected source for the compliance period. You may subtract from the total mass of organic HAP the amount of organic HAP contained in waste materials you send, during that compliance period, to a hazardous waste treatment, storage, and disposal facility regulated under 40 CFR part 262, 264, 265, or 266. The calculation equation (Equation 1 in § 63.4951) adds together all the organic HAP in the coatings, thinners, and cleaning materials and allows you to subtract organic HAP in waste materials as indicated above. The calculated mass of organic HAP is, therefore, not based on actual measurement of emissions to the atmosphere but rather assumes that all organic HAP used (less those in waste materials as appropriate) are emitted. This means of determining organic HAP emissions for compliance is consistent with the means by which we calculated emission rates from industry data on which the emission limits are based. We believe that Equation 1 in § 63.4951 is a simple mass-balance relationship which adequately quantifies the organic HAP emissions without imposing an excessive burden on respondents.

- Calculate the ratio of the total mass of organic HAP for the materials used to the total volume of coating solids used.

- Record the calculations and results and include them in your notification of compliance status.

If you use a capture system and control device other than a solvent recovery system for which you conduct a monthly liquid-liquid material balance, you must:

- Conduct an initial performance test to determine the capture and control efficiencies of the equipment (described

below) and to establish operating limits to be achieved on a continuous basis (also described below). The performance test must be completed no later than the compliance date for existing sources and 180 days after the compliance date for new and reconstructed sources (§ 63.4960). You must schedule it in time to obtain the results for use in completing your compliance determination for the initial compliance period.

- Determine the mass of organic HAP in each material and the volume fraction coating solids for each coating used during the initial compliance period.

- Calculate the organic HAP emissions from all the controlled coating operations using the capture and control efficiencies determined during the performance test and the total mass of organic HAP in materials used in controlled coating operations.

- Calculate the total mass of organic HAP emissions from uncontrolled coating operations.

- Calculate the ratio of the total mass of HAP emissions from both controlled and uncontrolled coating operations to the total volume of coating solids used during the initial compliance period.

- Record the calculations and results and include them in your Notification of Compliance Status.

The capture and control efficiency for a capture and control system other than a solvent recovery system for which you conduct monthly liquid-liquid material balances must be demonstrated based on emission capture and reduction efficiency. To determine the capture efficiency, you must either verify the presence of a permanent total enclosure (PTE) using EPA Method 204 of 40 CFR part 51, appendix M, (all materials must be applied and dried within the enclosure) or use one of three protocols in § 63.4964 to measure capture efficiency. If you have a PTE and all materials are applied and dried within the enclosure and you route all exhaust gases from the enclosure to a control device, then you would assume 100 percent capture.

To determine the emission reduction efficiency of the control device, you must conduct measurements of the inlet and outlet gas streams. The test must consist of three runs, each run lasting 1 hour, using the following EPA Methods in 40 CFR part 60, appendix A:

- Method 1 or 1A for selection of the sampling sites.

- Method 2, 2A, 2C, 2D, 2F, or 2G to determine the gas volumetric flow rate.

- Method 3, 3A, or 3B for gas analysis to determine dry molecular weight. As an alternative to Method 3B, you may use ANSI/ASME PTC 19.10–1981, Flue

and Exhaust Gas Analyses [Part 10, Instruments and Analyses].

- Method 4 to determine stack moisture.

- Method 25 or 25A to determine organic volatile matter concentration. In lieu of Method 25 or 25A, you may use Method 18 if you know the HAP constituents in the inlet and outlet gas streams and you quantify at least 90 percent of the organic compounds in the gas stream. Alternatively, any other test method or data that have been validated according to the applicable procedures in Method 301 of 40 CFR part 63, appendix A, and approved by the Administrator, could be used.

If you use a solvent recovery system and wish to calculate the mass of organic HAP emission reduction, you could determine the overall control efficiency using a liquid-liquid material balance instead of conducting an initial performance test. If you use the material balance alternative, you must measure the amount of all materials used in the affected source during the initial compliance period and determine the total mass of volatile matter contained in these materials. You must also measure the amount of volatile matter recovered by the solvent recovery system during the compliance period. Then you must compare the amount recovered to the amount used to determine the overall control efficiency, and apply this efficiency to the total amount of organic HAP for the materials used. You must record the calculations and results and include them in your Notification of Compliance Status when you present your calculations of the organic HAP emission rate.

*Operating limits.* In accordance with section 114(a) of the CAA, the operating limits would require the use of continuous parameter monitoring systems (CPMS) to ensure that sources are in compliance. The monitoring must be capable of detecting deviations with sufficient representativeness, accuracy, precision, reliability, frequency, and timeliness to determine if compliance is continuous during a reporting period.

As mentioned above, you must establish operating limits as part of the initial performance test of a capture system and control device, other than a solvent recovery system for which you conduct liquid-liquid material balances. The operating limits are the minimum or maximum (as applicable) values achieved for capture systems and control devices during the most recent performance test that demonstrated compliance with the emission limit.