

1. What are the analytical procedures for CPM Container #1 (Section 11.2.2)?

Due to a typesetting error during the last Method revisions final rulemaking (79 FR 11227), Sections 11.2.2.1 through 11.2.2.4 were inadvertently removed from the method. We are currently in the process of placing those sections back into the method. As a reference, we have provided those sections in-line in the PDF version of the method located on this page.

2. Is the hexane organic fraction used for condensable analysis at the bottom or the top of the separatory extraction funnel?

The organic layer that is evaporated to determine the residual organic condensable material in Method 202 is the top layer in the separatory funnel extraction. As of March 2014, the method text in Section 11.2.2 has been updated to clarify this procedure. The previous version incorrectly stated the organic layer would be on the bottom.

3. If significant sampling time or significant quantities of water are anticipated during Method 202 sampling, what can be done to purge SO₂ from the sample to minimize artifact formation?

If you anticipate long sampling times (over 2 hours) or high moisture from your source you may choose to recover the impinger catch from method 202 and perform one or more intermediate impinger purges within the requirements of the method. The entire first impinger from the sampling train is removed, the water is weighed to determine its contribution to the moisture calculation, and the short stem impinger is replaced with a long stem impinger that reaches into the liquid as required by the method. The impinger followed by a CPM filter is purged under pressure as specified in the method and then added to the appropriate sample container.

4. What is the rationale for switching from acetone/methylene chloride to Hexane/acetone for Method 202?

During the public comment period several commenters questioned the use of methylene chloride due to its toxicity and due to restrictions that preclude bringing this solvent onto certain test sites. Upon review of the type of material expected in the organic CPM fraction and based on the precedent set by selected hazardous waste methods used to recover organic material from water samples we chose to substitute hexane for methylene chloride.

5. Why can't Method 5B, 5E, 5F, 5G, or 5H be used to collect FPM in combination with M-202?

These variants of Method 5 even when combined with Method 202 do not yield total particulate matter. Some of these methods heat the filter and bias the results low compared to Method 202. If you were to combine one of these methods with Method 202 it may provide engineering assessment information but would not provide a consistent measurement of primary particulate matter consistent with the combination of filterable particulate and condensable particulate allowed in Method 201A and Method 202. With that said, there may be some State rules that limit a component of particulate matter (e.g., non-sulfuric acid particulate). In that case, you should perform testing using the same test method which the rules or regulatory authority require.

6. If the stack temperature is slightly above 85 deg F, may I use a cooling probe in junction with Method 201A or 17 in order to avoid the need for Method 202 to determine condensible PM?

Yes, per section 1.2. As long as you don't lower the probe and filtration temperature below the wet bulb or dew point of the exhaust gas, you may use a cooling prober (water or air) to reduce the filtration temperature below 85 degrees F and avoid the need to use Method 202 for the measurement of condensible PM. Any water condensation in the probe or on the filter will invalidate the run. As a reminder in this scenario, the primary PM, PM10, and/or PM 2.5 would be the sum of the filter and the appropriate acetone rinse fractions (probe, front half of filter holder and/or cyclone(s)). For further discussion of this topic, please refer to the "Summary of Public Comments and Responses for: Methods for Measurement of Filterable PM10 and PM2.5 and Measurement of Condensable Particulate Matter Emissions from Stationary Sources" document (EPA-HQ-OAR-2008-0348-0128) located in the Method 201A/202 docket (EPA-HQ-OAR-2008-0348).