3.3 Waste Determinations

3.3.1 Waste Determination to Determine Applicability of Subpart AA Standards (264.1034(c) and 265.1034(c))

SW-846 Methods are available on the World Wide Webb at www.epa.gov/sw-846 In order to show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the Subpart AA standards, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw. The owner or operator may use either direct measurement or process knowledge.

If direct measurement is used to prove the organic concentration is less than 10 ppmw, the owner or operator must collect a minimum of four grab samples of waste for each waste stream managed in the affected unit. The samples must be collected under process conditions which would be expected to cause the maximum waste organic concentration.

If the waste is generated onsite, the four grab samples must be collected at a point before the waste is exposed to the atmosphere. If the waste is generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system and the waste is not diluted or mixed with other waste. Each sample must be analyzed either by SW-846 Method 9060 or SW-846 Method 8260.

The arithmetic mean of the results of the analyses of the four samples must apply to each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processes and the mean organic concentration of each waste stream managed in the unit. If process knowledge of the waste is used to determine that its total organic concentration is less than 10 ppmw, documentation of the waste determination is required. One example of documentation that shall be used to support a determination under this provision include production process information documenting that no organics are used. Another example is information that the waste is generated by a process at the same or another facility that has previously demonstrated by direct measurement to generate a waste having a total organic content less than 10 ppmw. A third example is prior speciation analysis results on the same waste stream where it can also document that no process changes have occurred since that analysis that could affect the waste total organic concentration.

Sampling and analysis to demonstrate that a hazardous waste managed by a process vent has organic concentrations less than 10 ppmw must be conducted by the date the waste is first managed in a waste management unit. If the waste is continuously generated, the waste determination must be conducted annually. A determination is also required any time there is a change in the waste managed or a change in the process that generates or treats the waste.

When the owner or operator and the Regional Administrator do not agree on whether an affected unit manages a hazardous waste with organic concentrations of at least 10 ppmw based on the knowledge of the waste, the analysis of an appropriate sample of the waste with SW-846 Method 8260 is used to resolve the dispute.