

median source (the fiberboard mat dryer ranked "number 3") is uncontrolled.

When a process unit group had fewer than five process units, we determined the appropriate control technology based on the control technology used by the majority of the process units in the process unit group.

For those process units not required to meet the control requirements in today's proposed rule, we determined that: (1) The MACT floor level of control is no emissions reductions, and beyond the floor control options are too costly to be feasible; or (2) insufficient information is available to conclude that the MACT floor level of control is represented by any emissions reductions (miscellaneous coating operations and wastewater operations). We are requesting comment on whether no emissions reductions for miscellaneous coating operations and for wastewater operations is appropriate. Commenters should submit any information they have on HAP or VOC emissions from miscellaneous coatings and wastewater operations.

4. Determining the Performance Level of MACT Floor Technologies

Using the procedures described above, we determined that the proposed MACT floor level of control for process units was either no emissions reductions or equivalent to the emissions reductions achieved by incineration-based control systems or biofilters. Although some process units are equipped with add-on controls that perform at a level somewhere between zero emissions reductions and the performance level achievable with incineration-based controls and biofilters, none of these control systems were identified as MACT floor control technologies because they either do not reduce organic HAP emissions (bag houses) or do so on an inconsistent and unreliable basis (wet electrostatic precipitators). Therefore, we focused our analysis on incineration-based controls and biofilters.

For the purpose of establishing the performance level of the MACT floor control systems, we decided to group all of the available data on incineration-based controls and biofilters together. We grouped all the data together because the available data for incineration-based controls is incomplete. Without complete data, we could not identify which were the best performing incinerators; therefore, we could not identify the top performing 12 percent. By considering all of the performance data together, we maximized the amount of available data

on which we could base the MACT floor level of performance.

The reasons the available data are incomplete are: Multiple emission points are treated, inlet/outlet data are limited, data among pollutants vary, and pollutant loadings are variable. These are discussed below.

Multiple emission points treated. Some of the control systems treat HAP emissions from multiple types of process units, such as tube dryers, reconstituted panel presses, and board coolers. In those cases, separate determinations of the performance of the control system on emissions from each type of process unit were not possible.

Limited inlet/outlet data. Limited or no inlet/outlet data were available for the control systems applied to the process units in each group.

Variability in data among pollutants. In some cases, it was not possible to directly compare the performance of different control systems because data were not available for the same pollutant. For example, for one RTO, we might only have THC emissions data, and for another RTO, we might only have formaldehyde data.

Variability in pollutant loadings. Our ability to compare the performance of the different types of incineration-based control systems with each other and with biofilters was also hampered by the fact that the uncontrolled emissions being treated by the different control systems varied with respect to pollutant loading (inlet concentration) and pollutant type. For example, the available THC concentration data for the inlet of the control systems ranged from as low as 45 ppmvd to as high as 5,100 ppmvd. With the exception of some control systems with lower pollutant inlet concentrations, the available data for incineration-based controls and biofilters show that these control systems can achieve THC, methanol or formaldehyde emissions reductions greater than or equal to 90 percent.

We considered basing the control system performance level on just one pollutant, such as THC as a surrogate for HAP. Many of the existing PCWP facilities with MACT control systems are already required to meet a specified VOC control efficiency, and these facilities generally measure THC emissions as a surrogate for VOC emissions. Source VOC mass emissions (as required in new source review or prevention of significant deterioration reviews and emission limits for VOC by definition) must be expressed on a mass basis. This requires an adjustment for other compounds, such as formaldehyde, to the measured THC

emissions. However, THC emissions data sometimes include methane which is neither a HAP nor a VOC. The THC emissions data also frequently include other non-HAP compounds, such as terpenes, which are associated with processing of softwoods. We also considered basing the control system performance level on HAP, measured as total HAP, or methanol as a surrogate for HAP, or formaldehyde as a surrogate for HAP. Methanol and formaldehyde are the predominant HAP emitted from PCWP process units, and they can be measured directly. However, not all process units emit formaldehyde at detectable levels, and not all process units emit methanol at detectable levels, so basing the performance level only on methanol or only on formaldehyde was not possible. For process units where both the methanol and formaldehyde emissions are low, THC emissions may be the only viable option for defining the control system performance. We rejected basing the control system performance level on total HAP emissions because it seemed overly burdensome to require testing of multiple pollutants at the outlet of a control device when testing of one dominant pollutant would be sufficient for determining control device performance. Furthermore, the total HAP control efficiency could be negatively affected by those measurements for HAP not detected at either the inlet or outlet of the control device (e.g., the method detection limit used in the calculation of total HAP control efficiency may be slightly higher at the inlet than the outlet resulting in decreased total HAP control efficiency).

Another consideration in determining the performance level that represents the MACT floor level of control is the format of this performance level (e.g., percent reduction, outlet concentration level). In general, applying an incineration-based MACT control system to a process unit that emits high concentrations of HAP and THC will result in a greater percentage of emissions reductions than if that same incineration-based MACT control system was applied to a process unit that emits lower concentrations of HAP and THC. Therefore, a performance level solely in the form of a percent reduction in emissions could not adequately characterize the performance level of the MACT floor control technology. In similar MACT rulemakings where incineration-based control technologies represent the MACT floor, we have defined the performance level of the incineration-based control technologies as either a