

percent reduction or an outlet concentration, whichever is less stringent, with both forms being considered equivalent to the other. We have recognized in these previous MACT rulemakings that there are practical limits to the ability of incineration-based control systems to treat more dilute emission streams. We consider the practical limit of control of THC via incineration to be approximately 20 ppmvd in the outlet of the control device.

To account for the variability in the type and amount of HAP in the uncontrolled emissions from the various process units and the effect of this variability on control system performance, we decided to base the MACT floor performance level on all three of the pollutants we analyzed and include maximum concentration levels in the outlet of the control systems as an alternative to emissions reductions. The MACT floor performance level is a 90 percent reduction in THC or methanol or formaldehyde emissions. The maximum concentration level in the outlet of the MACT floor control system is 20 ppmvd for THC, or 1 ppmvd for methanol, or 1 ppmvd for formaldehyde. We chose 20 ppmvd as the alternative maximum concentration for THC because 20 ppmvd represents the practical limit of control for THC. We chose 1 ppmvd as the maximum outlet concentration for both methanol and formaldehyde because this concentration is achievable by MACT control systems and the method detection limits for these compounds using the NCASI impinger/canister method (NCASI Method IM/CAN/WP-99.01, proposed to be incorporated by reference in today's proposed rule) are less than 1 ppmvd. Based on the available data for MACT control systems, these six emission levels for add-on control systems are considered equivalent options for defining the performance level of a MACT control system.

D. How Did We Determine the MACT Floor for New Sources?

For new sources, the CAA requires the MACT floor to be based on the degree of emissions reductions achieved in practice by the best-controlled similar source. We believe for most process unit groups that the existing source MACT floor control level also represents the level of control appropriate for new sources because the same types of emission control systems, such as thermal oxidizers and biofilters, are used. In these cases, the existing source MACT floor technology represents the greatest degree of emissions reductions

that is achievable under all circumstances within each particular operation regulated by the proposed rule. For a few process units, the MACT floor level of control for new units is more stringent than for existing units. In those cases, we determined the MACT floor control level for existing process units was no emissions reductions, and that the MACT control level for new sources was represented by incineration-based controls or biofilters.

E. What Control Options Beyond the MACT Floor Did We Consider?

The control devices that represent the MACT floor control level achieve the greatest HAP emissions reductions of any available control technologies. There are no controls that achieve greater emissions reductions than the MACT floor control level for process unit groups with MACT floor control levels represented by incineration-based controls or biofilters; therefore, we only looked at beyond the floor options for process unit groups at existing sources where the MACT floor level of control was no emissions reductions. Process units that were inherently lower-emitting, such as sanding and sawing operations, were excluded from the beyond-the-floor analyses because emissions from these process units would not be cost effective to control. Based on a review of the HAP emissions data for process units where the MACT floor level of control was determined to be no emissions reductions, we selected blenders and stand-alone digesters for a beyond-the-floor analysis because these process units emit higher levels of HAP emissions relative to other process units. We also conducted beyond-the-floor analyses for three process unit groups with no emissions reductions at the MACT floor control level for existing sources but requiring control for new sources. These process units included fiberboard mat dryers, press predryers, and board coolers. We determined that the environmental benefits of requiring controls for these process units did not justify the cost. Moreover, many of the existing control devices at well-controlled facilities would not have the additional capacity to treat the emissions from these process units, and thus, these facilities would have to install new controls. Therefore, we decided that the control level for blenders, stand-alone digesters, fiberboard mat dryers, press predryers, and board coolers should be no emissions reductions at existing sources.

F. How Did We Select the Format of the Proposed Rule?

We decided to offer several formats for complying with today's proposed rule. The purpose of multiple formats is to provide you the flexibility to comply in the most cost-effective and efficient manner. We considered the following factors in selecting the format of the proposed rule:

- The format should allow for multiple compliance techniques for the various types of facilities in the industry.

- The format should simplify compliance and ensure that the cost of compliance is not excessive.

- The format must be enforceable.

The format of this proposed rule is based on a combination of production-based compliance options, percent emissions reduction compliance options, pollutant concentration compliance options, and work practice requirements. We are also including emissions averaging as an option for complying with the proposed rule. The following subsections describe the selection of the formats for each compliance option and work practice requirement included in the proposed rule.

1. Production-Based Compliance Options

The production-based total HAP compliance options apply to process unit emissions prior to entering an add-on control system. This option allows for future pollution prevention techniques and cost-effective control of inherently lower-emitting process units. The production-based compliance options were determined by applying a 90 percent reduction to the highest total HAP test for each type of process unit with a controlled MACT floor. A 90 percent reduction was selected because it is equivalent to the emissions reductions achievable through the use of MACT. The 90 percent reduction was applied to the highest tests rather than the average emission factors because the production-based options calculated using the highest tests more closely correlate with actual emissions from process units with MACT control systems. If the average emission factors were used in the calculation of the production-based compliance options, some of the process units with MACT control systems would not be capable of meeting those options. Use of statistical methods for predicting the highest test value likely to be observed for each process unit was also considered. However, the available total HAP test data sets are too small to justify use of