

would have the potential to emit at major source levels.

We disagree that the MACT floors must be based solely on major sources of HAP emissions. Section 112(d)(1) of the CAA directs us to promulgate rules for categories of major and area sources of HAP emissions. Then, section 112(d)(2) mandates that these standards "shall require the maximum degree of reduction in emissions * * * achievable for new or existing sources." Section 112(d)(3) specifies how we are to determine the maximum degree of emission reduction and describes it as "not less stringent than the emission control that is achieved in practice by the best controlled similar source" for new sources, and for existing sources describes it as "the average emission limitation achieved by the best performing 12 percent of the existing sources * * *." Even though Congress saw fit to distinguish between major and area sources in many other places in section 112 of the CAA, they specifically did not require that the floor be based on major sources. Throughout section 112(d), Congress simply used the term "source." We interpret this to mean that Congress left it to our discretion to determine the most appropriate sources on which to base the MACT floors. Accordingly, for the proposed rule we used both major sources and synthetic minor sources as the basis of the MACT floors. We believe our interpretation of section 112(d) of the CAA is correct, and no changes were made for the final rule as a result of these comments.

Comment: One commenter contended that EPA may not set floors for process vents based on the technology of thermal oxidizers, but must identify the best performing process vents, determine their actual performance, and calculate floors based on the average of that performance. Another commenter questioned the validity of establishing a single concentration for total HAP emissions from process vents and requested that different control and concentration limits be set for the organic HAP and inorganic HAP emissions.

Response: After reviewing the procedure we used to establish the MACT floors in light of these comments, we agree that we should first establish a MACT floor for both organic and inorganic HAP emissions from process vents (other than storage tanks) and then evaluate the appropriate emission limits for each. Based on a revised analysis, we calculated the MACT floor for organic process vents to be 98 percent control, or an organic HAP emission limit of 20 ppmv, which were the emission limits

in the proposed rule. For inorganic HAP, we calculated the MACT floor to be 95 percent control or an inorganic emission limit of 0.42 ppmv. We have written 40 CFR 63.7184 of the final rule to reflect these revised MACT floors.

Comment: One commenter had several concerns with the approach used to establish the MACT floor for storage tanks. The commenter believed that area source semiconductor manufacturing facilities and HCl production sources are not part of the major source semiconductor manufacturing category and should not have been relied on to set the storage tank MACT floor. Two commenters requested that any storage tank limits should be limited specifically to tanks storing HCl or hydrofluoric acid (HF).

Another commenter argued that EPA improperly based floors for storage tanks over 800 gallons on the performance of scrubbers. The commenter stated that EPA must identify the relevant best performing storage tanks, determine their actual performance, and recalculate floors for storage tanks over 800 gallons based on the average of that performance. The commenter also contended that EPA must conduct beyond-the-floor analysis for storage tanks under 800 gallons to determine the maximum degree of emissions reductions achievable.

One commenter argued that any final rule should exclude hazardous waste storage tanks and vessels storing wastewater. The commenter contended that EPA has not made the required MACT finding for hazardous waste storage tanks and vessels storing wastewater. The commenter further argued that hazardous waste storage vessels and vessels storing wastewater have low HAP concentrations and do not warrant regulation beyond RCRA requirements.

Response: We agree that the procedure outlined by these commenters is the best procedure for determining the MACT floors, assuming that the appropriate data are available. In the case of storage tanks, we had no such data. The only data the industry could provide to us were the size of the tank, contents of the tank, and whether emissions from the tank were controlled. No performance data were available for the tank emission controls used by the semiconductor industry. For these reasons, we used data on the performance of the most representative similar source for which data were available, which were for scrubbers on HCl storage tanks obtained from the HCl manufacturing industry. Based on these comments, we now believe it is more appropriate to develop separate MACT

floors for the different types of storage tanks in the semiconductor industry, and that it was inappropriate to use storage tanks from the HCl production industry as the most representative similar source.

It was always our intent to include all storage and wastewater tanks containing HAP in the affected source. However, based on the additional information provided by the industry, we have concluded that it was not appropriate to develop one MACT floor for all types of tanks due to the wide range of emissions from the each type of tank. While we cannot exempt an emission source solely due to the low annual emissions from that source, we thought that the MACT floor level of control could be influenced by the level of emissions from each type of tank and the existing regulations (*i.e.*, RCRA) to which some tanks may be subject. Therefore, we developed separate MACT floors for chemical storage tanks (including waste storage tanks regulated under RCRA), wastewater storage tanks, and wastewater treatment tanks.

We found that the MACT floor level of control for both chemical storage tanks and wastewater storage tanks, based on the top five best performing sources in each data set, is the same for each type of tank. The level of control is to reduce emissions through the use of a scrubber and is identical to the level of control used to establish the emission limits as proposed. However, based on other comments we received, we decided not to use the same procedure to establish the emission limits for the final rule. For wastewater treatment tanks, we determined the MACT floor level of control to be no emissions reduction.

The data set we used to establish the original MACT floor for storage tank emissions included the type of control (*e.g.*, scrubbers), but no information on the performance of the control devices or pollutant concentration in the outlet streams. In order to establish emission limits, we previously relied on the performance of controls used by the HCl production industry on HCl storage tanks. We used these data because the majority of tanks reported by the semiconductor industry contained HCl as well. We considered the HCl production industry data to be the most representative similar source for which we had data.

The comments we received questioned whether these storage tanks were representative, similar sources. In response to these comments, we further investigated the similarities and differences of the semiconductor manufacturing industry storage tanks