

in reduced worker exposure to both contaminants and heat stress. In high heat and humidity areas, it is likely that some type of air cooling will be required during summer. However, this issue is present even without the requirement for capture and control.

*Comment:* Five commenters stated that the limit of tooling gel coats (38 percent HAP) is not achievable. One commenter claimed that we set this limit based on one infrequently used product that is not representative of the industry as a whole. The commenter's products represent 70 percent of the tooling gel coat market and the maximum HAP contents range from 42 to 50 percent HAP. Their lower HAP gel coat has not gained a significant market acceptance. They have performed 2 years of research and development efforts aimed at developing a lower-HAP gel coat that would meet the requirements of the proposed rule and have been unsuccessful. They stated we had not independently tested the product on which the standard is based, so there has been no demonstration of the product's quality or suitability for broad use in the industry. The commenter also stated that setting the standard at 38 percent would have the effect of encouraging manufacturers of tooling gel coats to use para methyl styrene, which is not regulated as a HAP, as a substitute. Also, lower-HAP gel coats may be less durable than products currently on the market, which would result in reduced mold life. Therefore, more molds would have to be built to produce the same amount of product. This would result in the standard actually causing a HAP emissions increase. This commenter requested a tooling gel coat HAP limit of 52 percent HAP for clear gel coats and 49 percent for pigmented gel coats.

A second commenter asked that EPA consider tooling gel coats as speciality gel coats exempt from HAP limits similar to the speciality coating exemption contained in the Aerospace Coating MACT standards (40 CFR part 63, subpart GG). This commenter stated there is a strong possibility they will discontinue manufacturing tooling gel coats if the standard is not changed.

Another commenter stated that we must allow higher HAP limits for tooling applications in vacuum resin infusion, compression, and resin transfer molding composite tool applications, where high exotherms and heated tools are required. Durability of the mold surface is essential to the longevity of the mold. Thermal stability is a key element that requires higher-HAP content. Repeated high exotherms during the cure cycles can greatly

reduce the life of low-HAP gel coats. Greater porosity found in the low-HAP materials can also create mold surface problems. Ironically, these are closed molding processes, which result in much lower HAP emissions and employee exposures than open molding processes. Closed molding facilities will not be able to offset the small amounts of high-HAP tooling gel coat used in tool production with large amounts of low-HAP general purpose open molding resins using facility averaging. The commenter recommends that the final MACT standards allow up to 48 percent HAP content for pigmented tooling gel coats.

*Response:* We have received additional data since proposal. Based on these data, we increased the floor for tooling gel coats to 40 percent. We obtained very little data from industry on tooling gel coats in the original data requests and in additional efforts to obtain additional tooling gel coat data. To supplement the limited data, we looked at the tooling gel coat data used in developing the Boat Manufacturing MACT (40 CFR part 63, subpart VVVV). This is a reasonable approach because gel coat manufacturers stated that they sold the same tooling gel coats in both the reinforced plastic composites and boat manufacturing industries. The revised HAP content limit of 40 percent is the same as the Boat Manufacturing NESHAP HAP content limit for tooling gel coats.

We considered the issue raised by the commenters that a low limit in tooling gel coats would actually increase HAP emissions. While we agree that more frequent replacement of inferior molds would lead to increased HAP emissions, the factual data do not indicate that a 40 percent HAP content limit results in inferior molds. Facilities in the field (both reinforced plastic composite manufacturers and boat manufacturers) are building molds with 40 percent HAP tooling gel coat. We have no data to indicate that these facilities are producing lower quality molds than average, and none of the commenters has been able to provide objective data to substantiate that reduced mold life is inevitable with low-HAP gel coats. The information provided was based on assumed reduction in mold life. Also, the fact that one of the commenters covers 70 percent of the market is irrelevant, because MACT floors are set based on best control, not market share. In the absence of objective data that the facilities that use low-HAP tooling gel coats produce inferior molds with shorter mold lives compared to the rest of the industry, the MACT floor must be set based on the best performing

facilities. In this case, that results in a floor of 40 percent HAP.

*Comment:* One commenter stated that although clear cultured marble gel coats have been formulated with HAP levels as low as 40 percent, the tolerance for thermal shock and water resistance are lowered with lower-HAP levels. According to the commenter, 48 percent HAP clear coat is required for manufacturers to maintain current warranties and many have switched back to the high-HAP clear gel coats due to the poor performance of the lower-HAP clear gel coats. The commenter suggests that "clear gel coats for cultured marble" should be defined as "those used for products subject to ANSI Z124 testing" and the rule should limit the HAP content of these materials to 48 percent. A second commenter also stated that a 48 percent HAP content is necessary to meet desired gel coat performance. The commenter claims that the proposed limit of 44 percent does not take into account the entire spectrum of uses and does not satisfy the requirements of their applications.

*Response:* We are bound by the statutory requirements of the CAA to set MACT floors based on the average of the best performing sources as illustrated in the available data. In the absence of specific data to support the request, we have no basis to change the floor.

In developing different process product grouping for gel coats, we did consider the different performance characteristics of different types of gel coat. These types were tooling gel coat, clear gel coat, pigmented gel coat (white/off white), pigmented gel coat (all colors except white/off white), fire retardant gel coat, and corrosion resistant/high strength gel coat. Based on information provided by industry, we determined that these different gel coat types had sufficiently different characteristics that they should be considered separately for floor determinations. However, we do not have data to demonstrate that it would be appropriate to further subcategorize clear gel coats based on each gel coat's performance characteristics.

*Comment:* One commenter states that only the white/off-white and some pastels can meet a floor of 30 percent HAP because of the titanium dioxide and inert filler loading. Most solid colors require a HAP content of 38 to 40 percent. Higher performance pigmented gel coats that require high molecular weights would, therefore, need a higher monomer content to achieve workable viscosities and would probably no longer be available to the market place.

*Response:* White/off-white gel coats will be defined as those containing 10