

terminology for the averaging calculations. We now use the term "emissions factor" when discussing values calculated using actual resin and gel coat HAP contents, and "emissions limit" when discussing average values calculated from the required floor limits. This change should clarify how to calculate the weighted average floor.

Comment: Several commenters asked that EPA include a test method to determine the effectiveness of vapor suppressants. They suggested that the CFA-developed vapor suppressant test method be used.

Response: We agree with the commenter that the final rule should incorporate a test method applicable to vapor suppressants, which are effective at reducing HAP emissions for many resin applications. The effectiveness of vapor suppressants varies depending on the resin and the application technique used. Thus, a single effectiveness value cannot be assigned. The final rule, therefore, incorporates a test method to determine the effectiveness of vapor suppressants for facility-specific applications. This test method is being published as appendix A to subpart WWW of 40 CFR part 63.

Comment: One commenter states that the proposed rule is vague or silent on key issues including continuous monitoring of the preconcentrator control performance. The commenter states that the question of the practical long-term efficiency of the preconcentrator system is particularly disturbing because the proposed rule is silent on the issue of compliance assurance. Unfortunately, compliance assurance will present three problems: no available parametric measure will work to monitor absorber efficiency; continuous or semi-continuous flame ionization detectors (FID) are the only practical alternative, but are unreliable; and automated FID equipment is very expensive and prone to periods of malfunction.

The commenter also states that the only feasible available continuous emissions monitor (CEM) system that can measure styrene is an automated sampling device based on an equivalent FID sensor as described in EPA Method 25A of appendix A-7 to 40 CFR part 60 that has an annual cost of \$78,200 per year. The additional cost of this necessary compliance monitoring equipment was not included in the EPA cost analysis.

Response: We have reviewed the information on those facilities using add-on control devices with carbon adsorbers within the reinforced plastic composites industry and have found none that are using FID. These facilities

are able to demonstrate compliance with 95 percent reduction. Therefore, we do not believe it is necessary to require use of FID under the final rule and have not included the cost of such devices in our cost analysis.

Comment: One commenter notes that the requirements for sources to determine the HAP content should be the same as those in the Boat Manufacturing NESHAP (40 CFR part 63, subpart VVVV). The commenter points out that the boat rule allows sources to use information from the supplier or manufacturer and requires the use of the upper limit of a range if a range is provided and allows use of supplier information as long as a measured value does not exceed the provided value by more than 2 percentage points. The commenter notes that suppliers provide many of the same resins and gel coats to boat manufacturers and composites manufacturers.

Response: We agree with the commenter and the final rule has been written in line with the HAP content determination provisions found in the Boat Manufacturing NESHAP, which in part allow up to a plus or minus 2 percent allowance.

Comment: One commenter stated that the rule should allow composites manufacturers to change compliance options and should provide guidance on notification and record keeping requirements if affected sources need to switch compliance options.

Response: We agree with the commenter and have included language in the final rule making it clear that changes in the selected compliance option are allowed.

Comment: One commenter opposed capture and control for pultrusion sources based on worker safety. The commenter notes that the EPA analysis assumes an inlet concentration of 100 ppmv, but their measured concentrations are about 12 ppmv. At that concentration, according to the commenter, capture and control is not viable. The commenter claims that efforts to increase the inlet concentration lead to OSHA and industrial hygiene concerns and that any changes increasing the concentration to over 20 ppmv would exceed American Congress of Governmental Industrial Hygienists recommended maximums. Further, the commenter states that levels approaching 50 ppmv require installation of engineering controls (ventilation or HAP prevention) and exposure to these levels would meet with serious union objections. The commenter notes that these

considerations result in higher capture and control costs. The commenter requests that health related issues be fully addressed before the proposed above-the-floor capture and control is implemented. Another commenter stated that pultrusion products requiring constant attention would have to have an enclosure large enough for the operator to be inside, and this would increase health risks due to styrene exposures.

Response: As noted in previous responses, the above-the-floor requirement for 95 percent HAP emissions reduction is no longer required for pultrusion operations at existing sources and, therefore, capture and control is no longer an issue for existing facilities. We also note that our revised cost analysis now uses a target maximum inlet concentration of 50 ppmv rather than 100 ppmv. The 50 ppmv target is the same as the current OSHA 8-hour time weighted average limit for styrene.

We have not changed our position on capture and control for new sources, except, as discussed above, with respect to large parts made by pultrusion (and open molding) sources. New facilities can be designed with the appropriate measures in place to avoid worker exposure in excess of OSHA requirements. As previously discussed, facilities that have incorporated capture and control meet current OSHA requirements for worker safety.

Comment: Several commenters requested that preform injection, a technique that applies resin to the reinforcements in a closed box, be an allowed control technology because it is a more viable and readily attainable control technology than either add-on control or direct-die injection. One commenter stated that preform injection should qualify for a 90 percent HAP emissions reduction, and the CFA proposed definition and requirements should be used as the criteria for preform injection. A second commenter stated that although it falls short of 95 percent reduction, reduction rates of 90 percent are attainable and an excellent trade off given the applicability, capital requirements, and operating costs associated with preform injection.

Response: We agree with the commenters that preform injection is a viable control technology for reducing HAP emissions from pultrusion operations. Preform injection is included in the final rule as an option for meeting the 60 percent HAP emissions reduction requirement for existing pultrusion sources. However, as stated by the commenters, preform injection (and direct die injection) do