

^cCentrifugal casting operations where the resin is injected into the mold and the mold is completely closed during spinning and curing may be treated as closed molding operations.

^dPultrusion machines that produce parts with 1000 or more reinforcements and a cross sectional area of 60 inches or more are not subject to this requirement. Their requirement is the work practice of air flow management reduction.

^eContainers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place.

For existing sources that are equal to or above the 100 tpy HAP emissions threshold, centrifugal casting and continuous lamination/casting operations meet an above-the-floor requirement based on 95 percent control of HAP emissions.

The requirements for new sources that are equal to or above the 100 tpy HAP emissions threshold are also based on the floor level of control. The floor level of control for these sources is a 95 percent reduction of HAP emissions for open molding, pultrusion, SMC and BMC manufacturing, centrifugal casting, continuous lamination/casting, and mixing operations with one exception. For open molding and pultrusion operations at new sources that produce large parts, the floor level of control is the same as existing sources shown in the previous table. All other operations meet the requirements shown in the previous table.

In developing final requirements for reinforced plastic composites affected sources, we have provided an alternative format where possible. For example, a facility meeting a 95 percent HAP emissions reduction requirement for open molding processes can alternatively meet a HAP emissions limit. We have also provided alternatives for meeting the limits for continuous lamination/casting and SMC manufacturing operations.

E. What Are the HAP Emissions Factor Equations in Table 1 to Subpart WWWW of Part 63, and How Are They Used in the Final NESHAP?

Table 1 to subpart WWWW of part 63 presents a series of HAP emissions factor equations for open molding and centrifugal casting operations. These equations are specific to the type of resin and gel application and HAP emissions reduction technique used. These equations allow you to calculate HAP emissions factors based on HAP content and application method for each material that you use. These HAP emissions factors are then averaged and compared to limits in the final standards to determine if your open molding and centrifugal casting operations are in compliance.

The HAP emissions factor equations for open molding are identical to HAP emissions equations developed by the composites industry called the Unified

Emissions Factors (UEF) as they existed at the time of final rule development. These equations can also be combined with resin and gel coat use to determine HAP emissions rates. It should be noted that although the equations are identical to the UEF at the time the rule is finalized, for purposes of compliance, only the equations actually contained in Table 1 to subpart WWWW of part 63 may be used.

F. When Would I Need To Comply With the Final NESHAP?

We are requiring that all existing sources comply by April 21, 2006. Any source that commenced construction after August 2, 2001, at a site where there were no existing reinforced plastic composite operations is a new source. New affected sources that are now in operation must be in compliance on April 21, 2003. New affected sources that startup after April 21, 2003 must comply upon startup. Existing area sources that increase their HAP emissions or their potential to emit such that they become a major source of HAP must be in compliance within 3 years of the date they become a major source. New area sources that become major sources of HAP must comply upon becoming a major source. All open molding and centrifugal casting operations that comply by meeting a specified HAP emissions limit on a 12-month rolling average will have 1 year from the compliance date to demonstrate compliance.

We are allowing new and existing facilities 3 years to comply from the time their HAP emissions reach or exceed the applicability thresholds which require the installation of add-on controls, if these HAP emissions increases occur after their initial compliance date.

In addition, we have added a one-time exemption for facilities that exceed the 100 tpy threshold due to unusual circumstances. Facilities that apply for this exemption and subsequently exceed the threshold the next year, must comply within 3 years from the time their HAP emissions first exceeded the threshold. Because this is a one-time exemption, an exceedance in any future years would result in a requirement for compliance within 3 years of the subsequent exceedance.

G. What Are the Options for Demonstrating Compliance?

Today's final NESHAP provide several options for compliance for certain operations. We are providing these options to afford industry the flexibility to decide which method is best suited for each particular situation. Operations not listed in this section have only one option for demonstrating compliance.

For open molding and centrifugal casting operations, you determine compliance with the HAP emissions limits by determining HAP emissions factors for the operations at your facility, and comparing your HAP emissions factors to the appropriate HAP emission limits for each open molding and centrifugal casting operation. To determine your HAP emissions factor you may use the HAP emissions factor equations in Table 1 to subpart WWWW, or HAP emissions factors based on facility HAP emissions testing. For open molding operations at existing and new sources, the final rule allows you to choose to comply by meeting the individual HAP emissions limits shown in Table 3 to subpart WWWW of part 63 for each operation at your affected source, or by meeting the weighted average HAP emissions limit for all open molding operations at your affected source. In addition, if you produce parts with any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting operations at your affected source, you can comply using the an alternative method shown in Table 7 to subpart WWWW of part 63. You determine the highest allowable HAP resin for each individual operation from Table 3 to subpart WWWW of part 63. This same resin can then be used in all open molding and centrifugal casting operations as shown in Table 7 to subpart WWWW of part 63.

For open molding and centrifugal casting operations where the rule would require you to meet a percent reduction, you could use an add-on control device to achieve the required reduction, or you may choose to meet a HAP emissions limit that corresponds to that particular operation's percent reduction.

For continuous lamination/casting operations at existing and new sources, we are allowing you to demonstrate that each continuous casting line and each