Surface Coating of Wood Building Products NESHAP (subpart QQQQ) Compliance Options

This document is intended to assist you in determining the compliance option that best suits your wood building product surface coating operation and the steps involved in each compliance option. The subcategories and emission limits for subpart QQQQ are detailed below. After determining your emission limit, go to page 2 to choose your compliance option for each coating operation. Then follow the steps on the following pages to calculate your emission rate.

Subcategories and Emission Limits

<table>
<thead>
<tr>
<th>If your affected source applies coatings to products in the following subcategory:</th>
<th>And it is an existing source, the organic HAP emission limit is…</th>
<th>And it is a new or reconstructed source, the organic HAP emission limit is…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doors, Windows and Miscellaneous</td>
<td>231 (1.93)</td>
<td>57 (0.48)</td>
</tr>
<tr>
<td>Flooring</td>
<td>93 (0.78)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Interior Wall Paneling and Tileboard</td>
<td>183 (1.53)</td>
<td>5 (0.04)</td>
</tr>
<tr>
<td>Other Interior Panels</td>
<td>20 (0.17)</td>
<td>0 (0.00)</td>
</tr>
<tr>
<td>Exterior Siding and Primed Doorskins</td>
<td>7 (0.06)</td>
<td>0 (0.00)</td>
</tr>
</tbody>
</table>

*Units are grams of HAP/liter of solids (pounds of HAP/gallon of solids)*
Compliance Options Flow Diagram

Use this flow chart to choose the compliance option that you will use to demonstrate compliance with the emission limits (listed on the previous page) for each coating operation.

Start

Does your coating operation use or wish to use add-on control devices to meet the emission limit(s)?

Yes
Choose Option 3: Emission Rate With Add-On Controls Option

No

Does your coating operation use any thinners and/or cleaning materials that contain organic HAP?

Yes
Choose Option 2: Emission Rate Without Add-On Controls Option

No

Choose Option 1: Compliant Material Option

Note: All equation numbers correspond to the numbers in a separate document entitled “Surface Coating of Wood Building Products NESHAP: Equations”, not to the equation numbers in the final rule.
Compliance Option 1
Compliant Material Option

If you choose Option 1 (§63.4691(a)) to demonstrate compliance with subpart QQQQ, you must meet all the requirements of §§63.4740, 63.4741, and 63.4742. To determine compliance, you must perform the following calculations, which are described in more detail in the corresponding paragraph(s) of §63.4741.

§63.4741

(a) Determine the mass fraction of organic HAP in each coating, thinner, and cleaning material.

(b) Determine volume fraction of coating solids in each coating.

(c) Determine the density of each coating.

(d) Calculate the organic HAP content of each coating. (Use Equation 1.)

(e) Compare organic HAP content of each coating to applicable emission limit.
Compliance Option 2
Emission Rate Without Add-On Controls Option

If you choose Option 2 (§63.4691(b)) to demonstrate compliance with subpart QQQQ, you must meet all the requirements of §§63.4750, 63.4751, and 63.4752. To determine compliance, you must perform the following calculations, which are described in more detail in the corresponding paragraph(s) of §63.4751:

§63.4751

(a) Determine the mass fraction of organic HAP in each coating, thinner, and cleaning material.
(b) Determine the volume fraction of coating solids in each coating.
(c) Determine the density of each coating, thinner, and cleaning material.
(d) Determine the volume used of each coating, thinner, and cleaning material.
(e) Calculate the mass of organic HAP emissions from all coatings, thinner, and cleaning materials. (Use Equation 2.)
(f) Calculate the total volume of solids used for all coatings. (Use Equation 6.)
(g) Calculate organic HAP emission rate. (Use Equation 7.)
(h) Compare organic HAP emission rate to applicable emission limit.
Compliance Option 3
Emission Rate with Add-On Controls Option

If you choose Option 3 (§63.4691(c)) to demonstrate compliance with subpart QQQQ, you must meet all the requirements of §§63.4760 through 63.4768. You must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in §63.4692 and that you meet the work practice standards required in §63.4693. To demonstrate compliance, you must perform the following calculations, which are described in more detail in the corresponding paragraph(s) of §63.4761:

§63.4761

(b) Comply with operating limits.

(c) Comply with work practice requirements.

(e) Determine the mass fraction of organic HAP, density, and volume used for each coating, thinner and cleaning material; and volume fraction of coating solids.

(f) Calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners, and cleaning materials. (Use Equation 2.)

(g) Calculate the organic HAP emission reduction for each controlled coating operation. (Use Equation 8.)

(k) Calculate the total volume of volume solids used for all coatings. (Use Equation 6.)

(l) Calculate the mass of organic HAP emissions for each month. (Use Equation 18.)

(m) Calculate the organic HAP emission rate for the 12-month compliance period. (Use Equation 23.)

(n) Compare organic HAP emission rate to applicable emission limit.