

May 2, 2014

Document Control Office (7407M)  
Office of Pollution Prevention and Toxics (OPPT)  
Environmental Protection Agency  
1200 Pennsylvania Ave. NW.  
Washington, DC 20460-0001

Re: Comments on Formaldehyde Emission Standards for Composite Wood Product Rule – Docket #EPA-HQ-OPPT-2012-0018

To whom it may concern:

We thank the Environmental Protection Agency (EPA) for its continued work in crafting an effective regulation to control formaldehyde emissions from composite wood products that make their way into consumers' homes. The April 28, 2014 public meeting EPA held for discussion of the California Air Resource Board's (CARB's) March 2014 proposed changes to its own rule regarding laminators was productive.

EPA's promulgation of the final federal rule later this year will close a chapter for the many people whose health suffered due to formaldehyde exposure in FEMA trailers to which they were forced to move after Hurricanes Katrina and Rita disrupted their lives. The high levels of formaldehyde to which they were exposed appear to have largely stemmed from poorly made composite wood panels imported from overseas that were made using formaldehyde-based adhesives. By federalizing CARB's standards for composite wood products and addressing laminators, EPA will protect even more people in the future.

We applaud EPA for staying true to the science when it raised concerns about potential formaldehyde emissions from manufacturers who laminate a thin layer of veneer to CARB-compliant wood. Exposure risk is especially heightened where the veneer is paper-thin, as thin as one-thousandth of an inch, which can easily be saturated with glue and release significant levels of formaldehyde. There is sufficient evidence that excluding laminators from the rule could undermine many of the benefits that CARB, Congress, EPA, the industry and the public expected would result from a federal rule. A wholesale exemption for laminators would also serve to undermine confidence that furniture, cabinets and other wood products are consistently achieving stringent emission standards for formaldehyde.

However, the approach EPA offered in its June 2013 proposed rule seems to have been a bridge too far. From a public health perspective, we see the value in third-party certification for all products and believe the overall health benefits would more than offset the costs. While true to the science, EPA's proposal fell short of a pragmatic solution for domestic and overseas manufacturers alike.

We support CARB's approach of defining laminated products as a distinct category separate from hardwood plywood and setting an emission standard of 0.13 parts per million (ppm) based on the ASTM E 133-10 test method. A laminator applying a veneer to thin medium-density fiberboard likely could not achieve standards that are more stringent than those applicable to fiberboard, even if the veneer is hardwood.

Unfortunately, we do not think CARB's approach does enough to ensure that the laminated products will actually achieve the emission standard. For many of CARB's consumer products standards, such as low-volatile organic compound paint, the product can easily be tested with reproducible and verifiable results. However, for laminated wood, the test would involve sanding the veneer to remove the stain, varnish, or other coating to determine the extent of formaldehyde offgassing from the veneer itself. This

“deconstructive” testing is controversial with the industry with respect to its reliability and validity for enforcement purposes. Therefore, a 0.13 ppm standard would likely be challenged or may only be enforced when the levels are far over the limit.

A performance standard alone without a means to verify compliance efficiently and effectively, such as through third-party certification, is insufficient. We think a reasonable step short of requiring third-party certification is for laminators to be required to self-certify that their final products not only used a core that complied with the standards but that the product as a whole – after lamination – meets the 0.13 ppm standard. At a minimum, this self-certification must be included on the material or in the documentation that travels with the final product so that downstream buyers are able to rely on it. In addition, we think that the laminator should be required to register its self-certification status with EPA because, as a practical matter, it is difficult for the agency to enforce a rule when it has no idea who is maintaining that they comply with it.

We understand that some companies, especially those not subject to upward pressure from their customers, may not be truthful when they certify compliance. While EPA and CARB can and must investigate these situations, a vigilant supply chain is essential. Therefore, we think the self-certification must be detailed enough to allow the agency and buyers to reasonably assess laminator compliance.

More specifically, we propose that the use of any of three options would be sufficient to certify compliance and that EPA require laminators self-certify which of three options it used to comply. For furniture or cabinets that may have multiple components that rely on different options, the documentation would indicate all options used. The three options are:

***Option 1: No-added formaldehyde (NAF) resin.*** We believe EPA was correct to exempt laminators who use these resins. This is not just because formaldehyde off-gassing should be minimal, but also because compliance can be easily verified by checking a laminator’s business records. If a firm only purchased and used NAF resins, an investigator, whether at EPA, CARB or the buyer, could presume that the firm’s products are in compliance.

***Option 2: Ultra-low emitting formaldehyde (ULEF) resin system.*** We think EPA should incentivize industry innovation. Resin producers should be allowed to demonstrate to EPA or CARB that their product will consistently meet the 0.13 ppm standard when used under proper conditions. Those conditions could specify, for example, a minimum thickness of the veneer, low enough wood moisture content, or sufficient curing time. Subsequently, if a laminator can demonstrate that it uses only an EPA- or CARB-approved ULEF resin system in compliance with the system’s specified restrictions, EPA, CARB, or the buyer could presume that the firm’s products are in compliance.

An existing model for this approach is in the Residential Lead Renovation, Painting and Repair Rule at 40 CFR 745.82(a)(2). The provision allows the regulated industry to verify the absence of lead using “recognized test kits.” At 40 CFR 745.88, EPA provides criteria and methods by which the agency will recognize kits.

***Option 3: Periodic emissions testing of final products.*** Where the laminator is not relying on a NAF resin or ULEF resin system described above, EPA should require that the firm submit a representative sample of the laminated product to an EPA-recognized third-party laboratory for testing. If the results exceed 0.13 ppm, the laminator would have to correct the problems until it consistently passes the test. Given the modest costs of small chamber testing, an annual requirement is likely appropriate. In essence, a laminator must demonstrate that it is capable of consistently making compliant products. Cherry-picking a sample is a risk, but the laminator making the claim that the sample was representative would be liable for making a false certification.

This third approach provides a reasonable capacity for verification and seems sufficiently calibrated to the challenge. The EPA, CARB or buyer investigating the product would review the test results and, depending on the circumstances, may need to look further to ensure consistent compliance.

In sum, we believe that a self-certification approach is a pragmatic solution as long as there is reasonable means of verification. The three options described above provide that means and allow for product innovation. This approach is also consistent with EPA's NextGen Compliance program by building compliance into the rule by increasing transparency and accountability to consumers.

CARB's March 2014 proposal for laminators is an important step in the right direction, but more is needed to ensure compliance. We applaud EPA, CARB and the industry leaders who have worked for years to find a reasonable approach that works.

If you have questions, please contact Tom Neltner at 317-442-3973 or [tneltner@gmail.com](mailto:tneltner@gmail.com).

Sincerely,

Environmental Defense Fund  
National Center for Healthy Housing  
Healthy Schools Campaign