



**AmericanCoatings**  
ASSOCIATION

December 19, 2013

Ms. Lynn Baker and Ms. Angela Csondes  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

**RE: November 20, 2013 Public Workshop; Proposed Amendments to ARB's Airborne Toxic Control Measure (ATCM) to Reduce Formaldehyde Emissions from Composite Wood Products; ACA Comments**

Dear Ms. Baker and Ms. Csondes:

The American Coatings Association (ACA)<sup>1</sup> appreciates the opportunity to submit the following preliminary comments on the November 20, 2013 Public Workshop and the California Air Resources Board (CARB) Proposed Amendments to its Airborne Toxic Control Measure (ATCM) to Reduce Formaldehyde Emissions from Composite Wood Products. Please add Tim Serie (tserie@paint.org) and David Darling (ddarling@paint.org) from ACA to your stakeholder list for this rulemaking. At this time, we are still assessing the impact of the proposed inclusion of laminated products into the ATCM for composite wood products, and we would like to express our general concerns with the proposed rule; however, we will have more specific comments upon further reviews as the rulemaking progresses.

As proposed, laminates and any applied coatings would need to meet the 0.11 ppm finished article standard for formaldehyde. Requiring laminated products to comply with the existing standard provides no allowance or accommodation for formaldehyde emissions that might come from the coating. In other words, this proposed limit for finished articles assumes that the coatings currently contain or will need to contain zero formaldehyde. and will emit very little or no formaldehyde over time. CARB should evaluate this assumption and consider the technical, cost, environmental, and health concerns related to mandating low or zero-formaldehyde coatings. Of particular concern, conventional coatings typically used today on wood laminates for finished goods requiring more durability (such as kitchen cabinets), will not meet this criterion of zero formaldehyde.

ACA is concerned about the cost and technical concerns related to reformulating coatings to meet the finished article standard and the differences in application and use. The existing standard does not account for formaldehyde emissions from coatings, and it is likely that using current conventional wood coatings will not be feasible under the proposed limits; therefore, the coatings industry and end-users would need to move to non-formaldehyde containing or emitting finishes. In general, the coating industry does not have an extensive history of long-term performance with non-formaldehyde containing or emitting products for the targeted market. There are also supply limitations; for example, there is only one supplier of zero-formaldehyde resin for use in conversion varnish and pre-catalyzed lacquers.

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<sup>1</sup> The American Coatings Association (ACA) is a voluntary, nonprofit trade association working to advance the needs of the paint and coatings industry and the professionals who work in it. The organization represents paint and coatings manufacturers, raw materials suppliers, distributors, and technical professionals. ACA serves as an advocate and ally for members on legislative, regulatory and judicial issues, and provides forums for the advancement and promotion of the industry through educational and professional development services.

Zero or low-formaldehyde coatings are not “drop-in” replacements for the current coatings used in the industry. There are serious issues with converting from conventional to zero-formaldehyde coatings that must be addressed, including increased costs and potential application and performance problems. First, zero-formaldehyde coatings are considerably more expensive than conventional coatings. CARB must assess the reformulation costs and the increased costs to end-users (from the coatings, increased cost of spray and cure equipment, reduced production efficiency, and training). Second, zero-formaldehyde coatings cannot currently be formulated to meet lower VOC standards. Converting to these coatings products will increase smog formation and may actually have a greater adverse impact on indoor air quality. Another potential adverse consequence could include increased isocyanate exposure resulting from the use of more 2K polyurethanes. Third, the only available zero-formaldehyde resins often have a “yellow cast,” which means it cannot be used to formulate “water-white” clear finishes or a bright white pigmented finish. It is important that CARB evaluate any durability, ease of use, health concerns, and production concerns associated with moving from conventional to zero-formaldehyde coatings.

CARB should evaluate its validation methods for formaldehyde emissions from coatings. As mentioned during the November 20, 2013 Public workshop, validating formaldehyde emissions from coatings is very complex due to the number of different coating systems, inconsistencies in applications, and product composition (products could be comprised of various coated and uncoated substrates). In addition, formaldehyde emissions from coatings are difficult to quantify since the emission rates depend on the conditions at the time the coating was applied and during the cure process. CARB should ensure that the validation method accounts for these variations and that it applies the limits using a consistent and reproducible method.

ACA is also concerned about the differences in the time to market and the impact on domestic producers from foreign competition. CARB stated that emissions would be measured upon entry to California. This could greatly disadvantage U.S. companies since the time to market for U.S. products is significantly less than for off-shore manufacturers. This delay allows for additional off-gassing and a non-apples-to-apples comparison of domestic and foreign finished laminated products, at least with respect to the emission levels. In addition, we are concerned that if that our customers are forced to use formaldehyde free coatings at this time, it’s possible that that they will take their manufacturing outside the US. It is important that CARB assess this concern, any associated loss of business to foreign companies as a result.

Thank you for your consideration of our comments. Please feel free to contact us at (202) 462-6272 if you have any questions.

Sincerely,

/s/

/s/

David Darling, P.E.  
Director, Environmental Affairs

Tim Serie, Esq.  
Counsel, Government Affairs

*\*\* Sent via email \*\**