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# Hardwood Plywood & Veneer Association

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February 15, 2008

Clerk of the Board  
Air Resource Board  
1001 I Street  
Sacramento, CA 95814

**Re: HPVA Comments on Modified Regulatory Language for 15-Day Public Comment Period on Proposed Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products**

HPVA is submitting the following comments on the modified regulatory language for the ATCM on formaldehyde emissions from composite wood products.

**1. Exemption for Fabricators Manufacturing Hardwood Plywood (Laminated Product)**

As we have in all of our previous comments, we continue to object to the exemption that is provided a "Fabricator" who applies a face and back to a core (platform) because CARB has arbitrarily defined that product to be a laminated product. In fact, that product is hardwood plywood as defined in the ANSI/HPVA HP-1 standard, which CARB incorporates into its rule by reference for the purpose of regulating the formaldehyde emissions from that product. If the fabricator sells a laminated product on the open market, CARB interprets that product to be subject to the third-party certification requirements in rule. The laminated product became hardwood plywood. The product did not change, the disposition of the product did.

To totally confound this confusion, we understand in a recent private conversation with CARB staff, if the fabricator made the core of this product by manufacturing layers of veneer to make the core and also applied the face and back veneers, the fabricator would be defined as a manufacturer and subject to the rule. Even if that product (a.k.a. hardwood plywood or laminated product) was only used for further internal manufacturing into final products, the rule's provisions would apply. If the fabricator used a purchased core, but applied the face and back veneers, then CARB interprets that product as a laminated product exempt from the rule except that a certified core must be used. The finished product in every one of these situations is hardwood plywood as defined in the ANSI/HPVA HP-1 standard. An outside manufacturer of hardwood plywood supplying a fabricator is subject to all the rule's requirements. Given the costs associated with compliance, these tortured definitions and interpretations open the door for flagrant avoidance and possible violation of the requirements to protect public health.

Given the increasing importation of fabricated products from off shore, enforcement of this rule on these hardwood plywood manufacturers (fabricators) will be incredibly difficult. Given the recent pattern of toys, toothpaste, dumplings and other products which violate safety and public health standards, what basis does CARB have to believe an off shore fabricator of furniture, cabinets, or other component products will have a better record than these other consumer products? We have already provided for the record our experience with foreign made

products failure rates being 6 fold higher. Some of the highest emissions from products that we have measured recently are from off shore suppliers.

CARB needs to provide simple, straight forward definitions of the products that are covered. Developing new definitions for the same product invites disregard for the rule. If you placed side by side a hardwood plywood panel manufactured by one of our members, a panel manufactured by a fabricator with a TPC purchased core, and a panel completely manufactured by the fabricator, they will look and be the same. How could an enforcement officer know where to begin? We do know that a fabricator is provided significant opportunity to avoid the rigors of compliance testing simply because they are a fabricator even though the products are identical in their nature.

We offered a simple and straight forward recommendation to treat what is the same, identical product under a common and consistent definition but adjust the compliance regime for fabricators to insure that the rule's requirements are met but adjusting some of the compliance requirements. This is accomplished by the use of a "prototype product" that would use the resins and adhesives that have the same potential to emit formaldehyde without sacrificing very expensive face veneers which some fabricators claimed would be destroyed permanently.

Definition 35 "Plywood" states that "Plywood" includes panel products made by either hot or cold pressing (with resin) veneers to a platform." We urge CARB to maintain a single and consistent definition for hardwood plywood as contained in ANSI/HPVA HP-1 and remove the artifice of "laminated product" and "platform" from the rule entirely.

## **2. Curved Plywood Exemption**

For the same stated reasons we oppose an exemption for laminated products, we also object to an exemption for curved plywood. There is certainly a potential to emit a significant amount of formaldehyde from curved plywood. CARB should initiate an immediate evaluation of the potential for curved plywood to emit formaldehyde to insure there is a level playing field, especially for imports. We understand CARB will evaluate curved plywood for future amendments. We suggest this evaluation begin immediately. In the interim, curved plywood should be subject to at least the emission limits established in Section 93120.2(a).

## **3. Quality Control Testing Frequency for Hardwood Plywood**

For the purposes of 93120.12 Appendix 2(g)(4)(C), which sets out the testing frequency for HWPW, we recommend inserting the word "each" before "product type" and "product line" in the headings in the table on Page 1-58 to make the wording in the table conform with the wording in paragraph C above the table. Depending on the product types being manufactured, the production rates should differentiate between each product type as classified by a manufacturer (consistent with 93120.12 Appendix 2(f)(3)(A)(2) (page 55)) and the production volume in square feet, which then determines the frequency of the testing.

Additionally, it should be clarified that quarterly chamber testing for hardwood plywood is not required for each product type or product line, but only required for the product type or product line determined by the third party certifier to have the highest potential to emit based on routine quality control data (see 93120.12 Appendix 2(f)(3)(A)(2)) on page 1-55).

#### **4. Definition of Batch or Lot**

The definition of batch and lot is more suited to the production of particleboard and MDF. For hardwood plywood, we recommend simplifying the definition of a batch or lot as the production between one quality control test and the next as stipulated in Definition 26 (B) for a lot.

#### **5. Amount of Resin Used**

Unlike particleboard and MDF manufacturers, hardwood plywood manufacturers do not meter resin into a blender for resin application and therefore do not have a feedback mechanism to tabulate the amount of resin used. The adhesive used in hardwood plywood is most commonly a combination of resin, flour, water and catalyst mixed in a batch mixer and then transferred to and applied by a roll applicator. To require a hardwood plywood manufacturer to keep records with respect to the amount of resin used by volume and weight for a particular product type would be impossible for the following reasons:

1. No measuring device for the resin being applied. (Application levels are generally checked by a small representative weight sample or film gage, which is an estimate of the amount of adhesive being applied.)
2. The possibility of running numerous adhesive applicators from the same batch mix and the fact that some applicators may be running CARB compliance product and some non-CARB certified product.
3. Difficult, if not impossible, to quantify the amount of resin and adhesive lost due to waste. During the manufacturing process adhesive is wasted in various steps of the process ranging from leakage at the roll applicator, discarded substrate that has adhesive applied, over application caused by substrate that is larger than the finished panel to adhesive wasted during manufacturing line start-up and shut-down to identify a few. Comparing a manufacturers' panel production volume with their total resin/adhesive consumption would greatly over estimate the amount of adhesive actually applied to individual panels during the manufacturing of the hardwood plywood.

Under the best of manufacturing conditions, quantifying the amount of adhesive contained within any given plywood panel is an estimate at best. Accurate records of adhesive application rates, resin content of the adhesive mix and panel production volumes could be used to estimate the resin consumed during a given product run or manufacturing period.

#### **6. Secondary Test Method Small Chamber Size**

We object to inclusion of the smallest size chambers allowed in ASTM D6007 for certification of composite wood products (as small as 0.02 m<sup>3</sup>) that would result in testing "postage size" specimens. We do not believe very small test samples would be representative of a manufacturers' production and would not accurately depict the inherent variability of formaldehyde emissions from hardwood plywood. This would be especially true if a sampling scheme could be devised that is biased toward lower formaldehyde emissions based on the small sample size.

This change in the regulation was significant and the 15-day comment period did not allow us to evaluate data to recommend a minimum size small chamber. Information is being reviewed that should give us an indication of what the minimum chamber size should be. We request that the comment period for this aspect of the regulation be extended seven days to give us an opportunity to evaluate minimum chamber size and make a recommendation.

## **7. Application Process**

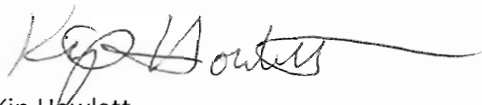
Our members are concerned with the potential length of time it takes (up to five months or more) to get CARB approval for the TPC exemption for HWPW manufactured with NAF or ULEF resins. We suggest CARB allow manufacturers to begin the application process before the three-month (NAF) or six-month (ULEF) data collection process is completed, with final approval from the Executive Officer dependent on submission of the full data set. Approval would then be virtually instantaneous, since the data will either show compliance or not.

## **8. Shipping Quality Control Limit (QCL)**

The purpose of the QCL or shipping QCL has as its basis the requirement in 93120.12 Appendix 2(g)(4)(C) that states "Quality control samples shall be analyzed within a period of time specified in the manufacturer's quality control manual to avoid distribution of non-complying lots" (Page 58) . We are concerned that this does not recognize the current industry practice of just-in-time delivery. We recommend that the wording in this section be changed to say if a manufacturer has substantial quality control data indicating compliance with the formaldehyde emission limits, an untested lot may be shipped while the QC test from that lot is being conducted provided there is sufficient time to recall the shipment before it gets into production at the customer's manufacturing facility if this lot fails.

We would like to thank CARB for the opportunity to comment on this draft of the regulation. Please contact either Gary Gramp (703-435-2900 Ext. 115, [gramp@hpva.org](mailto:gramp@hpva.org)) or myself (703-435-2900 Ext. 122, [khowlett@hpva.org](mailto:khowlett@hpva.org)) with any questions.

Sincerely,



Kip Howlett  
President

Cc: Jim Aguila  
Lynn Baker