

## **HPVA/ OMB MEETING POINTS:**

### **EPA's TPC and Emissions Standards Regulations**

**July 9, 2012**

**We support the federal formaldehyde composite wood panel emissions program; however we do not support wholesale adoption of all the CARB provisions because of serious flaws in their regulatory scheme.**

**We have recommendations on both the TPC regulation and the emissions standards regulation.**

#### **Background on the engineered hardwoods (HWPW and EWF) industry.**

The engineered hardwoods industry is comprised of both the hardwood plywood (HWPW) and engineered flooring (EWF) industries. They represent about a \$2 billion of market value today after having lost over \$1 billion of value with the current housing depression.

HWPW represents about two-thirds of this sector; half of which is produced in the Pacific Northwest, principally Oregon and the other half in the Eastern U.S. and Canada. Almost all EWF is manufactured with a veneer core, which are cross banded plies of wood veneer. There are some EWF product lines that use a HDF ply. Over 67% of HWPW is made with a veneer core (62%) or lumber and special core (6%). The other third is split almost evenly between particleboard and MDF core.

There are 6 resin technologies used to manufacture HWPW and EWF. Soy resin systems are used in about 60% of the HWPW and almost all EWF uses ULEF/MUF systems.

HPVA represents over 67% of the EWF manufacturing base and over 90% of the HWPW manufacturing base. HPVA Laboratories provides CARB certification to over 75% of the EWF manufactured in the U.S. and 90% of the HWPW manufactured in North America. Over 60% of these products (both HWPW and EWF) have qualified for exemption using all 6 resin systems.

HWPW/EWF has the lowest emissions requirements of all the regulated composite wood panels. The standard is also equivalent to the Japanese F\*\*\*\* standard which is also the lowest of any of the international standards. In other words, exempt products are achieving the lowest emission properties of any regulated material in the world. When you also consider that the quality assurance testing is conducted using loading rates of  $.13 \text{ ft}^2/\text{ft}^3$  and actual uses in homes and commercial spaces are typically at loading rates of  $.04 \text{ ft}^2/\text{ft}^3$ , ambient concentrations would be an order of magnitude below the highest product emission rate of the regulated products.

**Imports account for a huge share of the domestic market –platforms and HWPW/EWF finished products and fabricated products using these materials.**

In 2011, EWF imports accounted for 57% of the market volume and 56% of the market value of the total U.S. market. For HWPW in 2011, imports accounted for 78% of the market volume and 61% of the value of the total U.S. market. China has about a 66% share of the imported products. In North America there are 50-60 production facilities compared to about 600 production facilities in China.

Fabricated products such as furniture, ready to assemble kitchen cabinets, and architectural woodwork utilize “laminated” products which are exempt under CARB and/or CARB compliant panels if they are to be sold in California. These imports have a value of over \$6 billion into the U.S. market.

Imports present a regulatory compliance challenge to California and eventually EPA and Customs. Both the volume of materials and a number of producers is substantially greater than domestic producers who are more easily compelled to comply. In fact, the record for domestic HWPW/EWF producers is superlative as evidenced by the exemption qualification share.

**There are two national consensus standards for these products (ANSI/HPVA HP-1 2009 and ANSI/HPVA EF 2009) that have formaldehyde emission requirements entirely consistent with the emission requirements in the CARB regulation and the federal statute.**

These standards are also consistent with ISO 65 for both products qualifying for conformance to the emission requirements and conformance to achieving exempt status. For these reasons, HPVA supports their incorporation into the EPA regulations for emissions under the authority of the National Technology Transfer Act.

**Low emission performance should be rewarded with a reduced frequency of testing and inspection and consistent with ISO 65.**

An ISO 65 program insures consistent performance with the requirements to maintain exemption.

An exemption period of 2 or 3 years without any on-going quality assurance program avoids the likelihood of a failure to re-qualify for the exemption.

In the event of a failure to re-qualify, knowing when emissions exceeded the exemption qualification requirement is a small price for the costs of re-calls.

## **TPC's must be uniform and consistent**

Accreditation: we support selected accreditation agencies or a single agency to insure consistency in certification agencies. We know there are "paper hangers" certifying products.

Round robin testing is another means of insuring uniformity and consistency. This is a significant shortcoming in the CARB scheme. It was two years into the regulation that the first round robin was conducted and there were significant outliers. The second round robin has not been made public as it undergoes management review. The hardwood plywood samples that were selected and sent for the round robin were not uniform and even from a common manufacturer or production lot. Round robin tests should occur on a more regular frequency and with uniform test samples.

A laboratory's failure to establish equivalency demands immediate corrective action. To allow the shipment of products claiming certification when the certification organization's testing is not proven to be accurate exposes consumers to unknown risks. It also is grossly unfair to producers who have incurred significant costs to manufacture compliant product and prove compliance with added certification and testing costs.

## **Costs of certification can be significantly reduced and achieve the same compliance accuracy with the use of equivalent ASTM D 6007 tests to the ASTM E 1333 large chamber test.**

One sample from a panel or 3 samples from the same panel in a single small chamber test will cut testing costs by more than half. There is not within board emission variability to justify CARB's requirement of 3 separate tests from each panel for HWPW.

EWF should be tested back down as required in ANSI/HPVA EF 2009. CARB served on our Canvass Committee and supported that provision. Because the CARB rule also requires unfinished HWPW used to manufacture EWF also be tested, CARB was not in conflict with their rule. However this is an unnecessary duplicative expense.

Allowing greater use of the ASTM D 6007 test method will significantly reduce the certification costs for manufacturers who fabricate hardwood plywood. The costs of testing, the amount of product needed for a test, and associated shipping costs all add up to lower certification costs.

## **Costs of certification for manufacturers currently classified as "fabricators" can be reduced and still achieve compliance with ISO 65 requirements and meet the emissions standards.**

A cost effective compliance program can be achieved with the use of the ASTM D 6007 test method, with the qualification of common product lines characterized by the platform and the resins used, and by differentiating each products potential to emit. This can result in a customized testing frequency which will also support a cost effective compliance program.

**All manufacturers of hardwood plywood should be required to meet the same emissions requirement. CARB's "fabricator" exemption for "laminated panels" results in a substantial volume of products that are not compliant with the HWPW standard.**

CARB exempts a large spectrum of products on the basis of who manufactures them, i.e. fabricators. Furniture, cabinet and woodwork manufacturers who manufacture panels or components by gluing veneer onto a platform, regardless of whether it is veneer core, particleboard or MDF, have manufactured a product that is identical to hardwood plywood.

A HWPW manufacturer applying veneer onto a PB or MDF platform, both of which have significantly higher emission properties, must have their final product meet the HWPW emission standard, which is the strictest. CARB exempts a class of manufacturers, "fabricators", from the CARB when they apply veneer to these PB/MDF platforms. They have made the same product as the HWPW manufacturer. Our data shows that the range of product emissions on these platforms using 3 different resin technologies varies from BLQ-0.096 ppm for ULEF, BLQ-0.029 ppm for soy, and BLQ-0.043ppm for PVA. BLQ (below the limit of quantification) in our laboratory is 0.008 ppm.

As discussed below when veneer is applied to a veneer core (VC) platform which occurs in both the EWF and HWPW sectors, those manufacturers may be completely outside the CARB regulatory scheme even though those products compete directly with and cannot be differentiated from EWF/HWPW products where all the plies were laid up in a one step process.

These products cannot be differentiated in their final form from HWPW that is regulated under the CARB scheme. There is no way an enforcement officer can determine if a manufacturer or a fabricator made EWF or a HWPW component. They look the same because they are the same. Enforcement is virtually impossible.

There is not valid test method to enforce the "fabricator exemption". If it is determined that a "fabricator" made the veneered panel, then testing the platform (veneer core, particleboard, or MDF) for compliance in a consistent and reproducible method does not exist. To eliminate the face veneer or laminated surface material to test the platform alters the platform and the attendant emission characteristics. The solution is to test the finished product.

CARB does not have a standard for emissions from veneer core (VC) platforms. U.S. manufacturers of VC platforms certify to CARB standards but technically that is not a legal requirement. Do we know how off shore producers treat VC platforms? In other words, a non-compliant VC platform with veneer glued or “laminated” by a fabricator has no emission requirement even though it competes directly with HWPW/EWF that is required to comply.

At the consumer level otherwise similar engineered hardwood products (HWPW and EWF) will have different emissions and certification substantiation of compliance. The consumer has no way of knowing this difference and therefore has no reason to have faith in the system.

### **Exempt Qualifying Products**

There is an inherent conflict between the requirements of ISO 65 for product certification and the exemption system in the CARB rule. CARB provides a complete 2 year exemption from any periodic evaluation for NAF and a complete one year exemption for ULEF products. CARB is considering extending these exemption periods to 3 years.

### **What does ISO 65 accreditation mean?**

**Independence:** a certification body must be independent of any external pressure being able to influence a certification decision.

**Transparency:** the evaluation and certification processes must be transparent and explained to all parties before inspection.

**Quality:** certification decisions can only be consistent and suitable if there are proper internal control mechanisms. The existence of a quality control system, for example, supported by regular internal audits, is essential to identify problems and continuously improve service.

**Equality:** all producers must be treated equally and the certifiers shall perform periodic testing and product evaluation of client’s products.

What are the elements of an ISO 65 program?

[Internal Audits](#)

[Management Reviews](#)

[Confidentiality](#)

[Certificate Control](#)

[Documents & Records Control](#)

[Publications](#)

[Quality Manual](#)

In order to be consistent with ISO 65 requirements for products that have achieved exempt qualification, HPVA supports:

Periodic (quarterly) inspection by a desk audit process

Annual in-plant inspection required for ULEF and NAF exempt products under CARB equivalent criteria.

Bi-annual ASTM E- 1333 Large scale chamber or E-6007 Small scale chamber that has been determined to be equivalent to an ASTM E-1333 test chamber is required for NAF exempt products and annual test for ULEF exempt products under CARB equivalent criteria.

ANSI/HPVA HP-1 and EF are consistent with ISO 65.

***These comments are submitted by the Hardwood Plywood and Veneer Association, 1825 Michael Faraday Drive, Reston VA 20190. 703-435-2900 [www.hpva.org](http://www.hpva.org)***

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