

California Air Resources Board (CARB) Composite Wood ATCM (Rule)

Background

In 1992 CARB identified formaldehyde as a toxic air contaminant, which began a regulatory process to develop a risk assessment and subsequent regulations to reduce public exposure. The California risk assessment (far more conservative than USEPA) identified composite wood building products to be a major source of indoor formaldehyde exposure. CARB began developing an Air Toxic Control Measure (ATCM) which addressed the manufacture of Particleboard (PB), MDF, and Hardwood Plywood (HWPW). In 2007 CARB published a 250 page background / rule document, and the Board approved the Rule. Subsequent modifications have been made in early 2008. The rule sets 2 phases of formaldehyde emission limits for particleboard, MDF, thin MDF, HWPW composite core, and HWPW veneer core, to be met over the next few years. These limits apply to products made with these composite woods in California and sold or used in California. Oregon and Minnesota have asked CARB for information on the rule.

Fabricators

The rules define kitchen cabinet makers as “fabricators” not to be confused with “manufacturers” who actually manufacture the composite wood panels. Manufacturers under the rule are our suppliers. The rule sets requirements for various parties in the supply chain. Beside manufacturers and fabricators, the rule also covers importers, distributors, retailers, and third party certifiers (TPC). This document is specific to the impact on fabricators dealing with the other categories only as they impact cabinetmaking.

Emission Limits

Emission limits on the composite panels (as ppm formaldehyde) have different compliance dates and limits based on CARB’s assessment of available alternate resins and technologies:

Effective Date	HWPW-VC	HWPW-CC	PB	MDF	Thin MDF
1/1/2009	P1:0.08		P1:0.18	P1:0.21	P1:0.21
7/1/2009		P1:0.08			
1/1/2011	P2:0.05		P2:0.09	P2:0.11	
1/1/2012					P2:0.13
7/1/2012		P2:0.05			

These limits are based on large chamber tests (ASTM E1333-96) in ppm. P1=Phase 1 ; P2=Phase 2

Fabricator Compliance

Fabricators must take “reasonable prudent precautions” to ensure that the composite wood products either as raw board or assembled components that they purchase are in compliance with the applicable emission standards. CARB defines ” reasonable prudent precautions” as documentation showing that you instructed each supplier that their goods must comply with the ATCM (Phase1 and subsequently, Phase2) and that you have obtained written documentation from the suppliers that the goods are compliant. In addition, fabricators must keep records showing the purchase date and the supplier name, along with the earlier documentation. These records must be kept for 2 years and supplied to CARB upon request. You do not have to submit these invoices, bills of lading, shipping papers, compliance letters etc. unless requested by CARB. In California, CARB may delegate local Air Agency staff as their representatives .This type of record must be kept for each composite wood component going into your final product. These records must be final product based, that is, traceable to the individual cabinet that is under CARB scrutiny by using a mass balance approach. That is, showing by records that all composite board used during the fabrication period meets the ATCM.

Fabricator Labeling

Fabricators must also label their cabinets destined for California that contain regulated composite wood. The label shall be applied as a stamp, tag, sticker, or bar code on every cabinet or on every box containing a cabinet or component. Most recently, CARB Compliance has recommended that both the container and cabinet be labeled for compliance purposes. They recommend this as the box and cabinet may become separated.

The label is to include the fabricator's name, date of production, and a marking referencing P1 or P2 compliance by using wording like "this product meets the P1 (or P2) emission limits under CCR Sec 93120" to indicate that the product was made with compliant PB, MDF, or HWPW.

CARB has recommended that sell through product and displays not be labeled. CARB's position is that only fully compliant product should be marked. If a fabricator wishes to label sell through products, the label should say "this product meets CCR Sec 93120 until 7/1/2010" (the sell through date).

For displays, the fabricator must insure that if they don't meet the ATCM that they are not sold in California. Using the label "not for sale" in California is acceptable. The displays can't be sold in California but they could be donated. CARB does not expect every fabricator to label existing displays in the field. Fabricators should emphasize to their distributors that the displays are not to be sold.

Cabinet makers will have to educate their suppliers and customers to ensure that the required Chain of Custody is complete. CARB will expect to be able to trace the composite wood components of a kitchen cabinet back to the original board manufacturers.

Sell Through

The CARB rules allow the various parties to sell through product made before the 1/1/09 compliance date. Fabricators are allowed an 18 month sell through. There must be documentation however that the component or part was manufactured prior to 2009. The sell through applies to the compliance for that particular type of composite wood. January 1 is used as a surrogate since most panels have that as the compliance date. If a final product contained only HWPW-CC, the sell through period starts in July 2009 and ends in January 2011.

All parties in the supply chain have some allowed sell through period ranging from a few months for manufacturers to the 18 months for fabricators, retailers and distributors. These time periods are not additive. All sell through product must be through the entire system in 18 months. Thus realistically, the time periods are shorter than indicated. As indicated above, CARB would like cabinets which contain sell through components (parts made before January with noncompliant composite wood) to not be labeled. They do recognize that some fabricators may wish to label this product

Laminated Products

CARB added this definition in 2008 to cover fabricators who produce components similar to other compwoods. The best example is veneered cabinet doors and specialty parts, as to some even though these cabinet components are small and not to be confused with manufactured plywood panels, adding veneers to a compwood panel like particleboard or MDF is similar to the definition of hardwood plywood. CARB clarified that fabricators could make these products using compliant cores in their 2008 Amendments. Fabricators must label such products as containing complying composite wood products; no testing is required of the laminated products. A veneered PB cabinet door would have to meet the PB limit of 0.18 ppm formaldehyde instead of the 0.08ppm limit of HWPW.

The plywood manufacturers are strongly opposing this definition and asking CARB to change it. CARB has indicated that there will be a formal guidance document on the definition of laminated products. If not done carefully, the revised language could inadvertently exclude cabinet doors and specialty products although CARB insists that is not their intent.

Enforcement

CARB did run through the enforcement scenario in several presentations and the last webinar referenced here (<http://www.arb.ca.gov/toxics/compwood/workshops.html>):
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- 1) Inspect the final product for labeling compliance.
- 2) Check the Chain of Custody documentation at point of sale.
- 3) Screen suspect products in the field, probably using the FLEC tester which tests a small surface area (hopefully unfinished) of the component board for formaldehyde emissions. The test work for this is still ongoing.
- 4) Purchase final products (cabinets) from retail, commercial, and internet sales for disassembly and compliance testing back at the lab using small chambers.
- 5) Utilize complaints and hotline sources for products to test.

CARB compliance staff indicated that they would use the Notice of Violation (NOV) process if there is a problem to determine who is responsible if one fails the compliance steps above. This process is well established for environmental noncompliance. It typically involves fines established under California Health & Safety Code Section 42402, and sets distinct timetables for information gathering. Fines could be for; violation of emission limits, failure to take corrective action, knowing falsification of documents etc. The process also attempts to get at the length of time and frequency of the violations. There is an opportunity for fine mitigation by cooperation etc. CARB plans to deal with this as an office process, but if agreement can't be reached they will turn the issue over to the Attorney General.

Frequently Asked Questions

- 1) If I don't sell to California, do I have to comply with this regulation? Not if you are sure that your product won't end up there. Other States like Minnesota and Oregon are reviewing this regulation so it may spread.
- 2) Are there examples of documents and labels that are acceptable to CARB? Not at this time. They have indicated that standard bills of lading, invoices, and supplier letters that contain the relevant information are sufficient. Although they have specified what labels should contain, CARB has not developed model labels. The sell through issue complicates label guidance.
- 3) I have 25 suppliers, how am I going to know that their products meet the rule? You must document that you requested compliant materials, keep the documentation materials they provide with each shipment, and provide your customers with the relevant information. You should start the process well in advance of the 1/1/09 compliance date. You do not have to test products under the rule. If you have all the Chain of Custody information and have properly labeled your cabinet, CARB will go after the supplier of the faulty product.
- 4) Do I need a TPC? Although there are manufacturer TPC's that offer record retention services, fabricators are not expected to use TPC's. CARB will go to you not the TPC.
- 5) How do I know if the hardwood plywood I use is veneer core or composite core? Ask your supplier, or specify which you will use. Again, the earlier you begin this dialogue the better off you will be.