

WHAT THE EPA Formaldehyde Rule MEANS TO YOU

AN **UPDATED** QUICK REFERENCE GUIDE

**U.S. EPA's Formaldehyde
Emissions Standards for
Composite Wood Products,
Title VI of the Toxic Substances
Control Act (TSCA Title VI)**

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What the U.S. EPA Formaldehyde Rule Means To You At-A-Glance

TSCA Title VI Requirements and Compliance Dates

REQUIREMENTS	COMPLIANCE DATES
PANEL PRODUCERS	
Obtain certification by EPA-recognized third-party certifier for covered panel product types, including those eligible for NAF/ULEF exemptions or reduced testing	June 1, 2018
Comply with the following emissions limits (if no exemption): <ul style="list-style-type: none"> • Hardwood Plywood = 0.05 parts per million (ppm) • Particleboard = 0.09 ppm • MDF = 0.11 ppm • Thin MDF = 0.13 ppm 	June 1, 2018
Quarterly testing and quality control testing	June 1, 2018
Labeling and record-keeping (bills of lading, invoices, etc.)	June 1, 2018
FABRICATORS	
Source only TSCA Title VI compliant composite wood panels (sell-through permitted for pre-compliance date panel inventory)	June 1, 2018
Record-keeping (bills of lading, invoices, etc.)	June 1, 2018
Finished goods labeling	June 1, 2018
IMPORTERS	
Comply with certification requirements	June 1, 2018
Labeling and record-keeping (bills of lading, invoices, etc.)	June 1, 2018
Import certification required under TSCA Section 13	March 22, 2019
DISTRIBUTORS & RETAILERS	
Record-keeping (bills of lading, invoices, etc.)	June 1, 2018
Retain labels if bundles of panels are broken or finished goods are removed from boxes and the product itself does not bear a label	June 1, 2018
NON-EXEMPT LAMINATED PRODUCT PRODUCERS	
Source only TSCA Title VI compliant composite wood core panels	June 1, 2018
Record-keeping (bills of lading, invoices, etc.)	June 1, 2018
Meet all of the requirements for hardwood plywood, including 0.05 ppm emission limit and all certification, recordkeeping and testing requirements.	March 22, 2024
EXEMPT LAMINATED PRODUCT PRODUCERS	
Source only TSCA Title VI compliant composite wood core panels	June 1, 2018
Record-keeping (bills of lading, invoices, etc.)	June 1, 2018
Record-keeping demonstrating purchase/ use of NAF/PF resins	March 22, 2024

[This Guide reflects changes in the EPA Formaldehyde Rule effected by an agreed Order dated March 13, 2018 in litigation in the United States District Court in the Northern District of California \(Sierra Club v. Pruitt\). The Order changed many compliance dates from December 12, 2018 to June 1, 2018. It also provided that products certified to the CARB standard \(17 CCR §93120\) would be considered certified to TSCA Title VI until March 22, 2019 and may be labeled as such.](#)

SECTION #1

Composite Wood Products Covered

- **Particleboard**
- **Medium Density Fiberboard (MDF)**
- **Thin MDF** (≤ 8 mm in thickness)
- **Hardwood Plywood** made with a composite wood (particleboard or MDF), lumber, hardboard, veneer, or any other special core material.
- **Laminated products**, defined by EPA as composite or veneer core with attached wood or woody grass veneer (e.g., bamboo) made by a fabricator as a component part used in the construction or assembly of a finished good.

SECTION #2

Regulated Businesses

- **Panel Producer:** Manufacturer of regulated composite wood panels (hardwood plywood, particleboard or MDF).
- **Importer:** Importer of regulated composite wood panels, component parts or finished goods. This includes entity primarily liable for payment of duties and authorized agent.
- **Fabricator:** Manufacturer of domestic or imported component parts or finished goods made with regulated composite wood panels.
- **Distributor:** Distributor of regulated composite panels, component parts or finished goods made with regulated composite panels for purposes of resale or distribution in commerce.
- **Retailer:** A company that sells, offers for sale or supplies directly to consumers regulated composite panels, component parts or finished goods made with regulated composite panels.

SECTION #3

Specific Product Exemptions

- Hardboard as specified in ANSI 135.4, 135.5, 135.6 and 135.7 (2012 versions);
 - Rebuttable presumption that panels emitting more than 0.06 ppm are not hardboard;
- Structural plywood as specified in PS 1-07;
- Military-specified plywood;
- Curved plywood;
- Structural panels as specified in PS 2-04;
- Structural composite lumber as specified in ASTM D5456-06;
- Oriented strand board;
- Glued laminated lumber as specified in ANSI/AITC A190.1-2002;
- Prefabricated wood I-joists as specified in ASTM D5055-05;
- Finger-jointed lumber;
- Wood packaging (pallets, crates, spools, dunnage);
- Composite wood products used inside a new vehicle, other than a recreational vehicle, including rail cars, boats, and aircraft;
- Windows that contain composite wood products, if the windows contain less than five (5) percent composite wood product by volume;
- Exterior doors and garage doors that contain composite wood products, if:
 - Doors are made from composite wood products manufactured with no-added formaldehyde-based (NAF) resins or ultra low-emitting formaldehyde (ULEF) resins; or
 - Doors contain less than three (3) percent composite wood product by volume; and
- Goods owned by consumers that are subsequently resold on a secondary market.



Eco-Certified Composite™ (ECC) Sustainability Standard is a third-party audited program for composite wood panels that requires compliance with the world's most stringent formaldehyde emissions standards – EPA TSCA Title VI and CARB Phase 2 – and meets three of the five following rigorous environmental criteria: cradle-to-gate offsets resulting in a carbon sink/net carbon storage; local and renewable sourcing; use of recycled/recovered fiber; sustainable and efficient use of wood resources; and certified wood sourcing practices.

SECTION #4

Laminated Products Requirements

- Regulatory requirements for fabricators that make laminated products are dictated by the type of resin (or glue) that is used to attach the veneer to the core, and are divided into two types.
 - **NAF or Phenol Formaldehyde (PF) Resins:** must use compliant composite wood substrates and keep records, but are exempt from other requirements.
 - **Urea Formaldehyde and Other Formaldehyde-Based Resins:** must meet all of the requirements for hardwood plywood, including use of compliant core, 0.05 ppm emission limit, and all certification, recordkeeping and testing requirements.
- Both exempt and non-exempt laminated panels must meet recordkeeping requirements, contain TSCA Title VI compliant core and must be labeled if sold separately as of [June 1, 2018](#).
- Non-exempt laminated products must meet all hardwood plywood requirements by March 22, 2024.
- Exempt laminated products must meet recordkeeping requirements for resin use by March 22, 2024.
- Composite wood using other non-wood veneers, papers, etc. are not laminated products, but rather are treated as “finished goods.”
 - The only requirements are to use compliant core by [June 1, 2018](#) and meet recordkeeping and labeling requirements.

SECTION #5

Manufactured by Date and Sell Through

- Any composite wood panel that is manufactured or imported after [June 1, 2018](#) must meet the regulatory requirements.
- Composite wood panels made or imported before [June 1, 2018](#), may be sold at any time and may be used in finished goods and component parts at any time.
 - Notably, the regulation places limits on stockpiling non-compliant material before [June 1, 2018](#), so product manufacturers will need to review this carefully in preparing for the compliance date. (See §770.12).

SECTION #6

De Minimis Exemption

- There is a limited de minimis exemption for finished goods or component parts sold directly to end users if its composite wood content does not exceed 144 square inches on its largest face. This exemption applies only to labeling; products such as small picture frames and others that meet the de minimis definition must still be made with compliant composite wood and comply with recordkeeping requirements.

SECTION #7

Certification Requirements

Panel and Non-Exempt Laminated Products Requirements

- For particleboard, MDF, hardwood plywood and non-exempt laminated panels, compliance with emissions standards must be verified by an approved third-party certification agency (TPC) (see exemptions below).
- Panel producers are responsible for the emissions performance of all products certified.
- Each certified mill's compliance program must include a quality control manual describing quality systems, specified facilities and trained personnel.

TPC Certification

- Mills must be certified by an EPA TSCA Title VI recognized TPC, conduct regular quality tests and quarterly third-party audits/emission verifications by the TPC. Certification by a CARB-approved TPC will be acceptable until March 22, 2019.
 - Mills that are certified by a CARB-approved TPC do not need to requalify when applying for EPA Title VI recognition.
 - Mills not previously certified under CARB need to undertake additional verification testing in order to qualify with EPA and receive recognition.
- Mills must follow specific procedures for products found to be out of compliance with the standard, outlined in section #13.
- Quality control records must be retained for three (3) years.

CARB Reciprocity

- Products certified as compliant with the CARB Air Toxic Control Measure will be considered certified under TSCA Title VI until March 22, 2019 and may be labeled as such.

SECTION #8

Testing Requirements

- Compliance chamber testing
 - Initial and quarterly compliance chamber testing shall be conducted by an approved TPC using either ASTM E1333 (Large Chamber) or ASTM D 6007 (Small Scale Chamber) test. If D 6007 is used, equivalency to E1333 must be demonstrated.
- Quality control testing.
 - Testing must be conducted using methods approved by EPA and the TPC.
 - The regulation provides detailed requirements for testing frequency. (See §770.20(b)(2).)
 - Additional quality control tests must be conducted when there is a change in resin formulation, increase by more than 10% in resin amount or decrease in press time by more than 20%.
 - Frequency may be decreased if the plant shows prescribed levels of consistent operations and low variability of test values. (See § 770.20(b)(2)(ii))

SECTION #9

Exemptions to Third-Party Certification and Testing Requirements and Reduced Testing

Exemption

Approved ULEF and NAF composite wood panels are exempt from third-party certification and testing, but must make a regular demonstration of ongoing compliance.

- NAF panel producers must apply to EPA Title VI TPC and/or CARB to obtain an exemption and must provide (1) test results from one chamber test and three consecutive months of routine quality control tests for NAF products, or (2) test results from two chamber tests and six consecutive months of routine quality control tests for ULEF products.
 - NAF/ULEF hardwood plywood test values cannot exceed 0.05 ppm, and NAF/ULEF particleboard, MDF and thin MDF test values cannot exceed 0.06 ppm.
 - NAF products must also demonstrate a 90% or better compliance with a 0.04 ppm limit for the three consecutive months of quality control testing.
 - ULEF products must also demonstrate 90% or better compliance with a 0.04 ppm limit for the six consecutive months of quality control testing.

SECTION #9 CONTINUED

Reduced ULEF Testing

- Application procedures and data submission requirements are the same as above.
- ULEF panels test values cannot exceed the following limits:
 - Hardwood plywood - 0.05 ppm
 - Particleboard – 0.08 ppm
 - MDF – 0.09 ppm
 - Thin MDF – 0.11 ppm
- ULEF panels must also demonstrate 90% or better compliance through six (6) months of quality control testing with the following emissions levels:
 - Particleboard – 0.05 ppm
 - MDF – 0.06 ppm
 - Thin MDF – 0.08 ppm

Provisions Applying to Exemptions and Reduced Testing

A change in resin system invalidates an exemption or reduced testing approval and requires submission of new data for reapproval.

Changes in operational parameters require submission of additional test results showing compliance.

- Exemptions and reduced testing privileges run for two (2) years, at which time panel producers must reapply to an EPA Title VI TPC and/or CARB and submit at least one chamber test result for NAF products and two results of ULEF products confirming compliance with emission requirements.
- As noted above, laminated panels made with NAF or PF resins are exempt from third-party certification.

Qualification for Exemption/Reduced Testing

CARB and TSCA Title VI call for different emission level requirements to qualify for NAF/ULEF exemptions and ULEF reduced testing. For example, primary/secondary tests that must be submitted to qualify for an exemption are as follows:

- 0.04 ppm for CARB
- 0.06 ppm for TSCA Title VI

Renewals and process changes would similarly trigger different emissions requirements. Panel producers seeking to meet both California and federal requirements would be advised to meet the lower CARB standard.

SECTION #10

Labeling Requirements

Labels may be on individual composite wood panels or on bundles or packaging and must include the following:

- Panel producer's name or panel producer number
- Lot number
- EPA TSCA Title VI TPC number
- Statement that products are TSCA Title VI certified
- Optional – can label that panel is made with NAF or ULEF resins

Panel producers, importers, distributors, fabricators or retailers must have a method sufficient to identify panels taken from bundles (e.g., copy of bundle tags) and provide information on panels to customers upon request. The regulation's preamble provides that this requirement applies to the entity that initially divided or repackaged the bundle.

Labels must be placed on each finished good made with regulated composite wood, or alternatively on a box or bundle, and include the following:

- Fabricator's name, or if written consent obtained by downstream entity, the name of downstream fabricator, importer, distributor or retailer
- Date finished good produced
- Statement that finished good is TSCA Title VI compliant
- Optional: can include on label that finished goods made with composite panels containing NAF or ULEF resins, or if appropriate, a combination of NAF/ULEF panels and compliant panels.

If an unlabeled finished good is removed from its marked packaging, then the importer, distributor or retailer must keep a copy of the label and make the information available to customers upon request.

Labels may be applied as stamp, tag or sticker, but not as a barcode.

Following an amendment, TSCA Title VI now provides that regulated composite wood panels and finished goods that meet the required formaldehyde emissions standards and other requirements can be voluntarily labeled. [\[Note TSCA labeling can also be used until March 22, 2019 if the product is CARB certified.\]](#)

CARB has verbally committed to accept panels or finished goods labeled only as TSCA Title VI compliant under its program. CPA has requested that CARB put this in writing.

SECTION #11

Recordkeeping Requirements

Panel Producers and Non-Exempt Laminated Panel Producers must maintain the following records for three (3)* years:

- Quarterly emissions test results; **
- Ongoing quality control testing; **
- Production records;
- Records of changes in production;
- Records demonstrating initial and continued eligibility for reduced testing of NAF and ULEF products;
- Purchaser information for each composite wood product;
- Transporter contact information and shipping invoice number;
- Representative copies of labels; and
- Disposition of any non-complying lots, if applicable.

* Records demonstrating initial and continued eligibility for reduced testing or NAF/ULEF exemption must be kept for as long as the panel manufacturer is producing panels under the reduced testing or NAF/ULEF exemption.

** Although testing and certification is not required for NAF/ULEF exempt panels, records must be kept of tests that are conducted.

Records of quarterly chamber results must be made available to direct purchasers upon request.

Exempt laminated product producers must maintain the following records for three (3) years:

- Resin trade name, resin manufacturer details and purchase records;
- Panel producer contact information and purchase records;
- If cores made in-house, records showing that they have been certified by TSCA Title VI TPC; and
- If resins are produced in-house, records that they are NAF or PF.

Importers, fabricators, distributors and retailers

must maintain the following records for three (3) years and be able to make them available to EPA upon request within 30 days:

- Records identifying the panel manufacturer and date panels were manufactured;
- Records identifying the supplier, if different, and date of purchase; and
- Bills of lading, invoices or comparable documents that include a written statement from supplier that the panels, components or finished goods are TSCA Title VI compliant or were produced prior to **June 1, 2018**.

SECTION #12 Reporting

Panel producers (other than exempt NAF/ULEF producers) must provide the TSCA Title VI TPC monthly product data reports for each production facility, line and product type that includes the Quality Control Limit (QCL), shipping QCL, results of quality control tests and retest values.

Panel producers must inform the EPA TSCA Title VI TPC within 72 hours of any quality control test result that exceeds the established QCL.

Panel producers must also notify the TSCA Title VI TPC regarding a change in quality control manager, significant changes to production that could impact emissions and information related to the disposition of a non-complying lot.

SECTION #13 Non-Complying Lots

- A non-complying lot is any lot represented by a quarterly chamber test value or quality control test value that indicates that the lot exceeds the emission limit for the product.
- All non-complying lots must be isolated from certified lots.
- Panel producers are required to notify recipients of a lot within 72 hours of becoming aware of a failing chamber or quality control test result for that lot.
 - Panel producers can either recall the non-complying lot or work with recipients to treat, retest and certify the lot.
 - Panel producers must notify the TSCA Title VI TPC about final disposition of the lot.
- EPA has issued guidance that clarifies in particular the responsibilities for fabricators, distributors, importers and retailers in the event they have been supplied with a non-complying lot, which are as follows:
 - If a company has intact non-compliant panels in inventory, it must work with the panel producer to isolate, treat and retest those panels as needed.
 - If the company has further distributed the panels in the supply chain, then that company must notify the purchaser within 72 hours of the time the company was made aware of the non-complying lot by the panel producer.
 - If a company has already incorporated non-compliant panels into a component part or finished good, then that company does not have any obligation to notify downstream entities in the supply chain.

SECTION #14 Certification and Testing Services

Your best assurance of using EPA compliant products is to specify those certified by the Composite Panel Association (CPA). CPA's expertise is built on over four decades of formaldehyde testing experience, and has earned the recognition of the U.S. Department of Housing and Urban Development (HUD), major building codes, and the composite panel industry as a reliable source of data. It is also the foundation for CPA's designation as "TPC-1" – the first certification agency in the world to be approved as a Third-Party Certifier by CARB. A list of certified facilities is available at www.CompositePanel.org.

All CPA certified products are tested at CPA's International Testing and Certification Center (ITCC) in Leesburg, Virginia. The ITCC operates three large chambers (ASTM E 1333), six small chambers (ASTM D 6007) and accompanying conditioning room providing the capacity to offer customers timely test results. The 5,500 square foot facility has been engineered with today's ultra-low emitting products in mind. We have the most experience and best capabilities of any testing lab in North America.

Certification Services:

Ed Deomano at edeomano@cpamail.org

Testing Services:

Brian Patlen at bpatlen@cpamail.org

SECTION #15
Resources

Composite Panel Association (CPA)

703.724.1128

www.CompositePanel.org

Hardwood Plywood Veneer Association (HPVA)

703.435.2900

www.hpva.org

American Home Furnishing Association (AHFA)

336.884.5000

www.ahfa.us

Kitchen Cabinet Manufacturers Association (KCMA)

703.264.1690

www.kcma.org

EPA

202-564-6450

www.epa.gov/formaldehyde

CARB

(916) 324-6997

www.arb.ca.gov/toxics/compwood/compwood

This brochure is designed to be a quick reference to the EPA formaldehyde regulation.

CPA disclaims any liability for reliance on this guide for readers' compliance with the EPA regulation or obligation to update the information. Consult the full text of the regulation and your legal advisors on specific questions.

Updated March 20, 2018



The Composite Panel Association (CPA), founded in 1960, represents the North American wood-based composite panel and decorative surfacing industries on technical standards, industry regulation, and product acceptance. CPA General Members include 30 of the leading manufacturers of particleboard, medium density fiberboard (MDF), engineered wood siding and trim and hardboard in North America, representing more than 95% of industry manufacturing capacity. CPA's Associate Members encompass the complete value chain affiliated with the composite panel industry, including manufacturers of decorative surfaces, furniture, cabinets, and doors and mouldings, as well as laminators, distributors and equipment suppliers.

CPA also oversees the voluntary Eco-Certified Composite™ (ECC) Sustainability Standard and operates the ITCC, an internationally-accredited Third-Party Certifier (TPC) and the first in the world to be approved by the California Air Resources Board (CARB) for formaldehyde emissions testing and certification of composite panels. For more info, visit CompositePanel.org.