



# Air Resources Board



**Matthew Rodriguez**  
Secretary for  
Environmental Protection

**Mary D. Nichols, Chair**  
1001 I Street • P.O. Box 2815  
Sacramento, California 95812 • [www.arb.ca.gov](http://www.arb.ca.gov)

**Edmund G. Brown Jr.**  
Governor

August 26, 2015

Mr. Jeff Tuckey  
Columbia Forest Products  
7900 Triad Center Drive, Suite 200  
Greensboro, North Carolina, 27409

Dear Mr. Tuckey:

This letter is in response to a written request from Columbia Forest Products-Hearst (CFP-Hearst), that we received on June 3, 2015 for Air Resources Board (ARB) approval to renew your Executive Order as a no-added formaldehyde (NAF) manufacturer of composite wood products destined for sale, supply, or use in California. Your application includes a request to manufacture hardwood plywood-veneer core (HWPW-VC) with a NAF resin system. Staff reviewed your request and deemed your renewal application complete, pursuant to section 93120.3(c) of the Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products, (ATCM), title 17, California Code of Regulations, sections 93120-93120.12. We are pleased to inform you that your application to renew your Executive Order as an NAF manufacturer has been approved.

The enclosed Executive Order N-15-011 specifies ongoing conditions that must be met by CFP-Hearst as a manufacturer of NAF products for sale, supply, or use in California. Please note that all relevant provisions and requirements of section 93120.3(c), and other sections in the ATCM remain in effect. Section 93120.3(c)(4) specifies that the Executive Order issued to NAF manufacturers has a duration of two years, and the manufacturer may apply for re-approval as provided in the section. At the appropriate time, you may address your application for re-approval to me at the address noted in the letterhead. Furthermore, section 93120.3(c)(6) requires NAF manufacturers to notify ARB in advance if they decide to change to formaldehyde based resins, and then comply with the requirements of section 93120.3(b) for that product type.


*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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August 26, 2015  
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If you have any questions regarding this matter, please contact Layla Gonzalez at (916) 445-4448 or via email at [Layla.Gonzalez@arb.ca.gov](mailto:Layla.Gonzalez@arb.ca.gov), or Angela Csondes at (916) 445-1034 or via email at [Angela.Csondes@arb.ca.gov](mailto:Angela.Csondes@arb.ca.gov).

Sincerely,



Elizabeth Yura, Chief  
Emissions Assessment Branch  
Transportation and Toxics Division

Enclosure

cc: Layla Gonzalez  
Air Pollution Specialist  
Technical Analysis Section  
Transportation and Toxics Division

Angela Csondes  
Air Pollution Specialist  
Technical Analysis Section  
Transportation and Toxics Division

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER N-15-011

Relating to ARB Approval to use No-added Formaldehyde Resins by  
Composite Wood Product Manufacturers under  
section 93120.3, title 17, California Code of Regulations

**Columbia Forest Products – Hearst (CFP – Hearst)**

WHEREAS, the Air Resources Board (ARB) has adopted the “Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products” (the “ATCM”; title 17, California Code of Regulations, sections 93120-93120.12), which establishes formaldehyde emission standards for composite wood products;

WHEREAS, section 93120.1(a)(29) of the ATCM defines “no-added formaldehyde (NAF) based resins” to mean resins formulated with no-added formaldehyde as part of the resin cross linking structure for making hardwood plywood, particleboard, or medium density fiberboard, including, but not limited to resins made from soy, polyvinyl acetate, or methylene diisocyanate;

WHEREAS, section 93120.3(c) of the ATCM allows manufacturers of hardwood plywood, particleboard, and medium density fiberboard who use NAF based resins to apply for written approval from the Executive Officer for an exemption from the requirements of section 93120.3(b) of the ATCM;

WHEREAS, section 93120.3(c) of the ATCM allows manufacturers of hardwood plywood, particleboard, and medium density fiberboard who use NAF based resins to submit an application for an exemption from the requirements of section 93120.3(b) of the ATCM to the Executive Officer, which includes: (A) a statement indicating which product types will be manufactured using NAF based resins for sale in California; (B) the chemical formulation of the candidate NAF based resin(s), including base resins, catalysts, and other additives used in manufacturing; (C) the name of their ARB approved third party certifier; and (D) data on emissions performance of the candidate NAF based resin(s);

WHEREAS, the data on emissions performance of the candidate NAF based resin required in section 93120.3(c) of the ATCM must be obtained by working with an ARB approved third party certifier, and must include three months of routine quality control testing data, the correlation of the routine quality control testing data to primary or secondary method testing data, and the results of one primary or secondary method test, as required in Appendix 2 of section 93120.12 of the ATCM;

WHEREAS, section 93120.3(c)(1) of the ATCM requires that ninety percent of the three months of routine quality control testing data and the results of the one primary or secondary method test must be shown to be no higher than 0.04 parts per million (ppm), and that all data must be shown to be no higher than 0.05 ppm for hardwood plywood and 0.06 ppm for particleboard, medium density fiberboard, and thin medium density fiberboard;

WHEREAS, section 93120.3(c)(4) of the ATCM provides that the Executive Officer shall approve the application and issue an Executive Order if the evidence submitted by the applicant is sufficient to demonstrate that the applicant has met the requirements specified in section 93120.3(c)(1) of the ATCM;

WHEREAS, Columbia Forest Products – Hearst (CFP – Hearst or the “applicant”) submitted an original application dated November 24, 2008;

WHEREAS, the original application from CFP – Hearst specified the range in product manufacturing parameters, applicable post-press product treatments, base resin trade name(s) and base resin manufacturer(s)/supplier(s), and other ingredients added to the base resin by the applicant to manufacture NAF hardwood plywood products;

WHEREAS, ARB was provided base resin/adhesive information specifying the base resin polymer type and minimum and maximum values of all major and any minor ingredients in the base resin on percent weight of solids basis;

WHEREAS, the Executive Officer found that the evidence submitted by the applicant met the criteria specified in section 93120.3(c)(1);

WHEREAS, the original application from CFP – Hearst was deemed complete on February 9, 2009, and CFP – Hearst was issued Executive Order N-09-011, signed on February 18, 2009;

WHEREAS, section 93120.3(c) of the ATCM allows NAF product manufacturers to apply for re-approval by ARB by submitting an updated application;

WHEREAS, CFP – Hearst submitted an updated application for re-approval to ARB on February 16, 2011;

WHEREAS, the updated application for re-approval from CFP – Hearst was deemed complete on March 22, 2011, and CFP – Hearst was issued Executive Order N-11-011 signed on April 19, 2011;

WHEREAS, CFP – Hearst submitted a second updated application for re-approval to ARB on April 18, 2013;

WHEREAS, the updated application for re-approval from CFP – Hearst was deemed complete on June 21, 2013 and CFP – Hearst was issued Executive Order N-13-011 signed on June 27, 2013;

WHEREAS, CFP – Hearst submitted a third application for re-approval to ARB on June 3, 2015 which was deemed complete on August 19, 2015;

WHEREAS, the Executive Officer finds that the completed updated application demonstrated the NAF manufacturer's ability to continue to comply with section 93120.3(c)(1);

WHEREAS, the Executive Officer approved CFP – Hearst request for re-approval, and it is appropriate that Executive Order N-13-011 be superseded by this Executive Order N-15-011;

NOW, THEREFORE, IT IS ORDERED that CFP – Hearst is hereby approved as a NAF manufacturer of hardwood plywood – veneer core provided that the following terms and conditions are met for products sold, supplied, offered for sale, or manufactured for sale in California;

1. CFP – Hearst must use the commercial resin constituents listed and suppliers listed in section A of the confidential Attachment A for the manufacture of NAF hardwood plywood products.
2. The chemical formulation of the base resins used for the manufacture of NAF composite wood products by CFP – Hearst must be within the ranges specified for the base resin named in section B of the confidential Attachment A.
3. The application rate of the base resins used for the manufacture of NAF composite wood products by CFP – Hearst must be within the ranges specified in section C of the confidential Attachment A.
4. Other chemical components of the base resins (such as sizing wax or release wax) used for the manufacture of NAF composite wood products by CFP – Hearst must be within the ranges specified in section D of the confidential Attachment A.
5. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the NAF composite wood products by CFP – Hearst must be within the ranges specified in section E of the confidential Attachment A.
6. Only the composite wood products with the product names listed in section F of the confidential Attachment A are authorized under this Executive Order.

BE IT FURTHER ORDERED that this Executive Order N-15-011 supersedes Executive Order N-13-011, which was issued on June 27, 2013;

BE IT FURTHER ORDERED that CFP – Hearst may change the resin constituent supplier listed in section A of the confidential Attachment A if the new resin supplier supplies the same resin constituent listed in Confidential Attachment A, confirmatory emission tests are conducted and the Chief of the Emissions Assessment Branch within the Transportation and Toxic Division is notified in advance of using for production;

BE IT FURTHER ORDERED that CFP – Hearst must conduct confirmatory testing for a new resin supplier by demonstrating that the results of one primary or secondary method test for the new resin constituent supplier are no higher than 0.04 ppm for the NAF products authorized under this Executive Order;

BE IT FURTHER ORDERED that this Executive Order shall have a duration of two years, and the applicant may apply for re-approval as provided in section 93120.3(c)(4) of the ATCM.

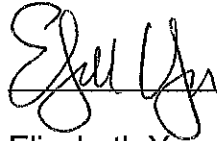
BE IT FURTHER ORDERED that the application for re-approval specified in section 93120.3(c)(4) of the ATCM, as applicable, requires the applicant to submit the results of at least one primary or secondary method test for the NAF products listed in the confidential Attachment A based on panels or a set of panels randomly selected and tested by an ARB approved third party certifier, and the chemical formulation of the NAF based resin(s). In addition, at least one primary or secondary method test must be provided for each facility which operates in accordance with this Executive Order, and the applicant must also include a current list of their resin suppliers.

BE IT FURTHER ORDERED that section 93120.3(c)(6) of the ATCM, as applicable, specifies that if the applicant decides to change to a formaldehyde based resin system, the applicant must notify ARB in advance of changing resin systems and must comply with the requirements of section 93120.3(b) of the ATCM for that product type.

BE IT FURTHER ORDERED that the applicant must maintain records in electronic or hard copy form for two years, for review by ARB upon request, as specified in section 93120.3(g) of the ATCM.

BE IT FURTHER ORDERED that the applicant must notify the Executive Officer in writing within 30 days of any change in their product manufacturing parameters or base resin manufacturer(s) or supplier(s) that constitute a modification outside the scope of their application for reduced testing under or an exemption from the requirements in section 93120.3(b) of the ATCM.

Executed at Sacramento, California this 26 day of August, 2015.

A handwritten signature in black ink, appearing to read "Elizabeth Yura", written over a horizontal line.

Elizabeth Yura, Chief  
Emissions Assessment Branch  
Transportation and Toxics Division

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Confidential

**Attachment A**  
***Formulation Data and Operating Parameters***  
***Page 1 of 2***

State of California  
AIR RESOURCES BOARD  
Executive Order N-15-011

**Columbia Forest Products – Hearst (CFP – Hearst)**

**Section A.**

**Resin Binder Supplier: Solenis (Formerly Ashland Water Technologies)**

- Address: 3 Beaver Valley Road, Suite 300, Wilmington DE 19803

**Commercial Binder Name: Hercules CA 1100**

- Resin Binder Type: Polyamide Epichlorohydrin (PAE)

Solenis, the resin supplier for Columbia Forest Products – Hearst, regards the chemical formulation data of their base resin as a trade secret. Solenis has not disclosed this information to Columbia Forest Products – Hearst and has requested that ARB treat this information as confidential. However, Columbia Forest Products – Hearst remains legally responsible under this Executive Order for insuring that the base resin specifications are within the ranges specified in the original application and any subsequent amendments to this Executive Order.

Confidential

**Attachment A**  
***Formulation Data and Operating Parameters***  
***Page 2 of 2***

State of California  
AIR RESOURCES BOARD  
Executive Order N-15-011

**Columbia Forest Products – Hearst (CFP – Hearst)**

**Section C.**

**Base Resin Application Rate (pounds per thousand glue lines):**

- Hardwood plywood – veneer core (min/max): 390 to 530

**Section D.**

**Other Ingredients Added by the Composite Wood Product Manufacturer  
(Amount Added per Pound of Base Resin on a 100% Solids Basis):**

CFP Hearst mixes their base resin on-site in the amounts specified in Section B of this Executive Order.

**Section E.**

**Allowable Operating Parameters:**

- Press Temperature (°C)
  - Hardwood plywood – veneer core (min/max): 118 (no range specified)
- Press Time (Minutes):
  - Hardwood plywood – veneer core (min/max): 1 to 11

**Section F.**

**Product Names & Types Authorized in Executive Order N-15-011:**

- Purebond® hardwood plywood veneercore, thickness range: ¼ to 1 inch