

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER N-16-133B

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

**Unilin US MDF**

WHEREAS, the California Air Resources Board (CARB) 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 NAF as part of the resin cross linking structure for making hardwood plywood (HWPW), particleboard (PB), or medium density fiberboard (MDF), 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 HWPW, PB, and MDF 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 HWPW, PB, and MDF 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 CARB-approved third-party certifier (TPC); 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 CARB-approved TPC, and must include three months of routine quality control testing data, the correlation of the routine quality control testing data to primary or secondary 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 90 percent of the three months of routine quality control testing data and the result of 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 HWPW and 0.06 ppm for PB, MDF, and thin medium density fiberboard (tMDF);

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, Unilin US MDF (Unilin or the "applicant") submitted an original application dated on October 17, 2012;

WHEREAS, the application from Unilin 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 MDF and tMDF products;

WHEREAS, CARB was provided base resins/adhesives information specifying the base resin polymer type and minimum and maximum values of all major and any minor ingredients in the base resins on a 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 Unilin was deemed complete on October 18, 2012, and Unilin was issued Executive Order N-12-133, signed on October 22, 2012;

WHEREAS, Unilin submitted an updated application for re-approval to CARB on October 1, 2014;

WHEREAS, the updated application for re-approval from Unilin was deemed complete on October 14, 2014, and Unilin was issued Executive Order N-14-133, signed on October 22, 2014;

WHEREAS, Unilin submitted an updated application for re-approval to CARB on September 30, 2016;

WHEREAS, the updated application for re-approval from Unilin was deemed complete on October 26, 2016, and Unilin was issued Executive Order N-16-133 signed on October 28, 2016;

WHEREAS, Unilin submitted a request to CARB on April 19, 2017, for approval to add another resin system to Executive Order N-16-133;

WHEREAS, Unilin provided the required testing data and the required formulation data for the added resin system;

WHEREAS, the Executive Officer approved Unilin's request to add another resin system, and Executive Order N-16-133 was superseded by Executive Order N-16-133A, signed on June 28, 2017;

WHEREAS, Unilin submitted a request to CARB on June 18, 2018, for approval to add another two resin systems to Executive Order N-16-133A;

WHEREAS, Unilin provided the required testing data and the required formulation data for the added resin systems;

WHEREAS, the updated application for approval to add another resin system was deemed complete on June 18, 2018; and

WHEREAS, the Executive Officer approved Unilin's request to add another two resin systems and it is appropriate that Executive Order N-16-133A be superseded by this Executive Order N-16-133B.

NOW, THEREFORE, IT IS ORDERED that Unilin is hereby approved as a NAF manufacturer of MDF and tMDF provided that the following terms and conditions are met for products sold, supplied, offered for sale, or manufactured for sale in California:

1. Unilin must use the commercial resins listed and suppliers listed in Section A of Confidential Attachment A for the manufacture of NAF MDF and tMDF products.
2. The chemical formulation of the base resins used for the manufacture of NAF composite wood products by Unilin must be within the ranges specified in Section B of Confidential Attachment A of this Executive Order.
3. As specified in section B of Confidential Attachment A, Unilin is legally responsible for ensuring that the base resin is within the ranges specified in Section B of Confidential Attachment A of this Executive Order.
4. The application rate of the base resin used for the manufacture of NAF composite wood products by Unilin must be within the ranges specified in Section C of Confidential Attachment A of this Executive Order.
5. Other chemical components of the base resins (such as sizing wax and release wax) used for the manufacture of NAF composite wood products by Unilin must be within the ranges specified in Section D of Confidential Attachment A of this Executive Order.
6. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the NAF MDF and tMDF products by Unilin must be within the ranges specified in Section E of Confidential Attachment A of this Executive Order.

7. Only the composite wood products with the product names listed in Section F of Confidential Attachment A of this Executive Order are authorized under this Executive Order.

BE IT FURTHER ORDERED that this Executive Order N-16-133B supersedes Executive Order N-16-133A, which was issued on June 28, 2017.

BE IT FURTHER ORDERED that Unilin may change the resin system supplier listed in Section A of Confidential Attachment A if the new resin supplier supplies the same resin type listed in Confidential Attachment A, confirmatory emission tests are conducted, and the Chief of the Risk Reduction Branch within the Transportation and Toxics Division is notified in advance of using the new resin system for production.

BE IT FURTHER ORDERED that Unilin must conduct confirmatory testing for any new resin supplier by demonstrating that the result of one primary or secondary method test for the new resin system supplier is no higher than 0.04 ppm for the NAF products authorized under this Executive Order.

BE IT FURTHER ORDERED that the expiration date of this Executive Order is two years from the date of issuance of Executive Order N-16-133 (i.e., October 28, 2016); 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 tests for the NAF products listed in Confidential Attachment A based on panels or a set of panels randomly selected and tested by an CARB-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 CARB 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 Executive Officer may review and, for good cause, modify or revoke this Executive Order as provided in section 93120.3(c)(4) of the ATCM. The Executive Officer shall not modify or revoke this Executive Order without affording the applicant the opportunity for a hearing in accordance with the procedures specified in title 17, California Code of Regulations, section 60055.1 et seq.

BE IT FURTHER ORDERED that the applicant must maintain records in electronic or hard copy form for two years, for review by CARB 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 2<sup>nd</sup> day of July, 2018.

  
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Richard Boyd, Chief  
Risk Reduction Branch  
Transportation and Toxics Division