

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER N-17-141

Relating to ARB-Approval to conduct primary/secondary method and routine quality control testing at a less frequent rate by Composite Wood Product Manufacturers that use Ultra-low-emitting Formaldehyde Resins under section 93120.3, title 17, California Code of Regulations

**Arauco Flakeboard America Ltd.**

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)(42) of the ATCM defines "ultra-low-emitting formaldehyde (ULEF) resins" to mean "resins formulated such that average formaldehyde emissions are consistently below the Phase 2 emission standards in section 93120.2," for making hardwood plywood (HWPW), particleboard (PB), medium density fiberboard (MDF), or thin medium density fiberboard (tMDF);

WHEREAS, section 93120.3(d) of the ATCM allows manufacturers of HWPW, PB, MDF, and tMDF who use ULEF resins to apply for written approval from the Executive Officer for an approval to conduct primary/secondary method and routine quality control testing at a less frequent rate than specified in sections 93120.3(b) and 93120.12, Appendix 2, of the ATCM;

WHEREAS, section 93120.3(d) of the ATCM allows manufacturers of HWPW, PB, MDF, and tMDF who use ULEF resins to submit an application for approval to test their products at a less frequent rate than specified in sections 93120.3(b) and 93120.12, Appendix 2 of the ATCM to the Executive Officer, which includes: (A) a statement indicating which product types will be manufactured using ULEF resins for sale in California; (B) the chemical formulation of the candidate ULEF resin(s), including base resins, scavenger resins, scavenger additives, catalysts, and other additives as used in manufacturing; (C) the name of their ARB-approved third party certifier (TPC); and (D) data on the emissions performance of the candidate ULEF resin(s);

WHEREAS, the data on emissions performance of the candidate ULEF resin required in section 93120.3(d) of the ATCM must be obtained by working with an ARB-approved TPC, and must include six 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 two primary or secondary method tests, as required in Appendix 2 of section 93120.12 of the ATCM;

WHEREAS, section 93120.3(d)(1) of the ATCM requires that ninety percent of the six months of routine quality control testing data and two primary/secondary method tests be no greater than 0.05 ppm, and all routine quality control data must be shown to be no higher than 0.08 ppm for ULEF manufacturers of particleboard to gain approval to conduct their emission testing at a less frequent rate than specified in sections 93120.3(b) and 93120.12, Appendix 2;

WHEREAS, section 93120.3(d)(5) 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 sections 93120.3(d)(1) of the ATCM;

WHEREAS, Arauco Flakeboard America Ltd. submitted an application, dated January 10, 2013;

WHEREAS, the application from Arauco Flakeboard America Ltd. 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 ULEF PB 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 base resins/adhesives information for the original application was provided to ARB by Arauco Flakeboard America Ltd's resin supplier, and is set forth in Confidential Attachments A and B;

WHEREAS, the application from Arauco Flakeboard America Ltd. was deemed complete on January 16, 2013, and Arauco Flakeboard America Ltd. was issued Executive Order N-13-141, signed on January 23, 2013;

WHEREAS, section 93120.3(d)(5) 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 in section 93120.3(d)(1) of the ATCM;

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

WHEREAS, Arauco Flakeboard America Ltd. submitted an updated application for re-approval to ARB on December 15, 2014;

WHEREAS, the updated application for re-approval from Arauco Flakeboard America Ltd. was deemed complete on December 29, 2014, and Arauco Flakeboard America Ltd. was issued Executive Order N-15-141, signed on January 12, 2015;

WHEREAS, Arauco Flakeboard America Ltd submitted an updated application for re-approval to ARB on January 4, 2017;

WHEREAS, the updated application for re-approval from Arauco Flakeboard America Ltd. was deemed complete on March 30, 2017;

WHEREAS, the Executive Officer finds that the completed, updated application demonstrated the ULEF manufacturer's ability to continue to comply with section 93120.3(d) of the ATCM; and

WHEREAS, the Executive Officer approved Arauco Flakeboard America Ltd's request for re-approval, and it is appropriate that Executive Order N-15-141 be superseded by this Executive Order N-17-141;

NOW, THEREFORE, IT IS ORDERED that Arauco Flakeboard America Ltd. is hereby approved as a ULEF manufacturer and qualified to test their PB less frequently, as specified by the requirements of section 93120.12, Appendix 2 subsections (f) and (g) of the ATCM, provided that the following terms and conditions are met for products sold, supplied, offered for sale, or manufactured for sale in California;

1. Arauco Flakeboard America Ltd. must use the commercial resins listed and suppliers listed in Section A of Confidential Attachment A of this Executive Order for the manufacture of ULEF PB products.
2. The chemical formulation of the base resins used for the manufacture of ULEF composite wood products by Arauco Flakeboard America Ltd. 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, Arauco Flakeboard America Ltd. is legally responsible for insuring that the base resin is within the ranges specified in Section B.
4. The application rate of the base resins used for the manufacture of ULEF composite wood products by Arauco Flakeboard America Ltd. 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 ULEF PB products by Arauco Flakeboard America Ltd. 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 ULEF composite wood products by Arauco Flakeboard America Ltd. 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-17-141 supersedes Executive Order N-15-141, which was issued on January 12, 2015;

BE IT FURTHER ORDERED that Arauco Flakeboard America Ltd. may change the resin system supplier listed in section A of Confidential Attachment A of this Executive Order if the new resin supplier supplies the same resin type listed in Confidential Attachment A of this Executive Order, at least two primary or secondary method tests are performed on random samples selected by their ARB-approved third party certifier, and the Chief of the Emissions Assessment Branch of the Transportation and Toxics Division is notified before Arauco Flakeboard America Ltd. uses the resin for production;

BE IT FURTHER ORDERED that Arauco Flakeboard America Ltd. must conduct confirmatory testing for a new resin supplier by demonstrating that the results of two primary or secondary method tests for the new resin system supplier are no higher than 0.05 ppm for the ULEF products authorized under this Executive Order;

BE IT FURTHER ORDERED that this Executive Order shall have a duration of two years from the date this Executive Order is signed; the applicant may apply for re-approval as provided in section 93120.3(d)(5) of the ATCM;

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 if there is any change in their product manufacturing parameters or base resin manufacturer(s) or supplier(s) that does not comply with any of the requirements, terms or conditions specified in the ATCM or this Executive Order.

Executed at Sacramento, California this 12 day of May, 2017.



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Elizabeth Yura, Chief  
Emissions Assessment Branch  
Transportation and Toxics Division