

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER N-16-032

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

UPM-Kymmene Wood Oy, Jyväskylä (UPMK Jyväskylä)

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, particleboard, or medium density fiberboard;

WHEREAS, section 93120.3(d) of the ATCM allows manufacturers of hardwood plywood, particleboard, and medium density fiberboard who use ULEF 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(d) of the ATCM allows manufacturers of hardwood plywood, particleboard, and medium density fiberboard who use ULEF 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 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; 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 third party certifier, 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)(2) of the ATCM requires that ninety percent of the six months of routine quality control testing data and the results of two primary or

secondary method tests 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(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) and 93120.3(d)(2) of the ATCM;

WHEREAS, UPM-Kymmene Wood Oy, Jyväskylä (UPMK Jyväskylä or the "applicant") submitted an original application dated October 12, 2009;

WHEREAS, the original application from UPMK Jyväskylä 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 hardwood plywood-veneer core 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 a percent weight of solids basis;

WHEREAS, the base resins/adhesive supplier, commercial name, and resin type are set forth in Confidential Attachment A;

WHEREAS, the original application from UPMK Jyväskylä was deemed complete on November 9, 2009, and UPMK Jyväskylä was issued Executive Order N-09-032, signed on December 3, 2009, listing their base resin systems in Confidential Attachment A;

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, UPMK Jyväskylä submitted an updated application for re-approval to ARB on November 16, 2011;

WHEREAS, the updated application for re-approval from UPMK Jyväskylä was deemed complete on December 20, 2011 and UPMK Jyväskylä was issued Executive Order N-12-032 signed on January 5, 2012;

WHEREAS, UPMK Jyväskylä submitted a second updated application for re-approval to ARB on December 9, 2013;

WHEREAS, the second updated application for re-approval from UPMK Jyväskylä was deemed complete on February 3, 2014 and UPMK Jyväskylä was issued Executive Order N-14-032 signed on February 6, 2014;

WHEREAS, UPMK Jyväskylä submitted a request and supplementary documentation to ARB on December 15, 2014, for approval to add another resin system to Executive Order N-14-032;

WHEREAS, the application and request submitted by UPMK Jyväskylä demonstrated that the added base resin system is the same type base resin system as listed in Confidential Attachment A for Executive Order N-14-032;

WHEREAS, UPMK Jyväskylä provided the required testing data and the required formulation data for the added resin system, and Executive Order N-14-032 was superseded by Executive Order N-14-032A;

WHEREAS, the updated application for amendment from UPMK Jyväskylä was deemed complete on February 2, 2015, and UPMK Jyväskylä was issued Executive Order N-14-032A, signed on February 11, 2015;

WHEREAS, UPMK Jyväskylä submitted an application for re-approval to ARB on February 12, 2016;

WHEREAS, UPMK Jyväskylä also requested one of the base resin systems be replaced with a new base resin system;

WHEREAS, UPMK Jyväskylä provided information that demonstrated that the new base resin system is the same type of base resin system as listed in Confidential Attachment A for Executive Order N-14-032A;

WHEREAS, UPMK Jyväskylä provided the required testing data and the required formulation data for the replacement resin system;

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;

WHEREAS, the Executive Officer approved UPMK Jyväskylä request for re-approval, and it is appropriate that Executive Order N-14-032A be superseded by this Executive Order N-16-032.

NOW, THEREFORE, IT IS ORDERED that UPMK Jyväskylä is hereby approved as a ULEF manufacturer of hardwood plywood – veneer core that is exempt from the requirements of section 93120.3(b) and Appendix 2 of section 93120.12 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. UPMK Jyväskylä 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 hardwood plywood – veneer core products.
2. The chemical formulation of the base resins used for the manufacture of ULEF composite wood products by UPMK Jyväskylä 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, UPMK Jyväskylä 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 UPMK Jyväskylä 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 hardwood plywood – veneer core products by UPMK Jyväskylä 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 hardwood plywood – veneer core products by UPMK Jyväskylä 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-16-032 supersedes Executive Order N-14-032A, which was signed on February 11, 2015;

BE IT FURTHER ORDERED that UPMK Jyväskylä 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 UPMK Jyväskylä uses the resin for production;

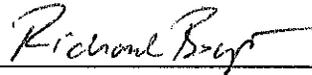
BE IT FURTHER ORDERED that UPMK Jyväskylä must conduct confirmatory testing for a new resin supplier by demonstrating that the results of two primary or secondary method tests for the new resin system supplier are no higher than 0.04 ppm for the ULEF products authorized under this Executive Order;

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 2nd day of May, 2016.



Richard Boyd, Chief
Emissions Assessment Branch
Transportation and Toxics Division