

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER N-12-057A

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

**Perfecta Plywood Ltée**

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 NAF 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 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, Perfecta Plywood Ltée (Perfecta Plywood or the "applicant") submitted an original application dated April 5, 2010;

WHEREAS, the original application from Perfecta Plywood specifies 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 – 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 resin/adhesive information for the original application was provided to ARB by Dural, Perfecta Plywood's resin supplier, and is set forth in Confidential Attachments A and B;

WHEREAS, the original application from Perfecta Plywood was deemed complete on April 5, 2010, and Perfecta Plywood was issued Executive Order N-10-057, signed on August 12, 2010;

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

WHEREAS, Perfecta Plywood submitted an updated application for re-approval to ARB on July 20, 2012;

WHEREAS, the updated application for re-approval from Perfecta Plywood was deemed complete on August 12, 2012;

WHEREAS, Perfecta Plywood was issued Executive Order N-12-057 signed on October 19, 2012;

WHEREAS, Perfecta Plywood submitted a request to ARB on December 7, 2012, for approval to add two additional resins from Dural and Franklin International to manufacture their NAF hardwood plywood – veneer core products; and

WHEREAS, Perfecta Plywood provided the required testing data and resin formulation data for the new NAF resins, and it is appropriate that Executive Order N-12-057 be superseded by this Executive Order N-12-057A.

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, the Executive Officer finds that the evidence submitted by the applicant meets the criteria specified in section 93120.3(c)(4) of the ATCM;

NOW, THEREFORE, IT IS ORDERED that Perfecta Plywood 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. Perfecta Plywood must use the commercial resins listed and suppliers listed in section A of Confidential Attachment A for the manufacture of NAF hardwood plywood – veneer core products.
2. The chemical formulation of the base resins used for the manufacture of NAF composite wood products by Perfecta Plywood must be within the ranges specified for the base resin named in section B of Confidential Attachment A.
3. As specified in section B of Confidential Attachment A, Perfecta Plywood 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 NAF composite wood products by Perfecta Plywood must be within the ranges specified in section C of Confidential Attachment A.
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 Perfecta Plywood must be within the ranges specified in section D of Confidential Attachment A.
6. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the NAF composite wood products by Perfecta Plywood must be within the ranges specified in section E of Confidential Attachment A.

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

BE IT FURTHER ORDERED that this Executive Order N-12-057A supersedes Executive Order N-12-057, which was issued on October 19, 2012;

BE IT FURTHER ORDERED that Perfecta Plywood may change the resin 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 one 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 Stationary Source Division is notified before Perfecta Plywood uses the resin for production.

BE IT FURTHER ORDERED that Perfecta Plywood must conduct confirmatory testing for any new resin supplier by demonstrating that the results of four primary or secondary method tests for the new resin system 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 tests for the NAF products listed in 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 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 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 24<sup>th</sup> day of March, 2013.



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Daniel E. Donohue, Chief  
Emissions Assessment Branch  
Stationary Source Division