



Air Resources Board



Matthew Rodriguez
Secretary for
Environmental Protection

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov

Edmund G. Brown Jr.
Governor

July 9, 2014

Ms. Helen Kozhevnikova
Vyatsky Plywood Mill, Ltd.
1, Kommuny Street
Novovyatsk District, 610013 Kirov
Russia

Dear Ms. Kozhevnikova:

This letter is in response to a written request from Vyatsky Plywood Mill Ltd. (Vyatsky Plywood) that we received on June 16, 2014, for Air Resources Board (ARB) approval to renew your Executive Order as an ultra-low-emitting formaldehyde (ULEF) manufacturer of composite wood products destined for sale, supply, or use in California, and to add a fourth resin to the Executive Order. Staff reviewed your request and deemed your renewal application complete, pursuant to section 93120.3(d) 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 ULEF manufacturer has been approved.

The enclosed Executive Order N-14-073 specifies ongoing conditions that must be met by manufacturers of ULEF products for sale, supply, or use in California. In addition, please note that all relevant provisions and requirements of section 93120.3(d), and other sections in the ATCM remain in effect. Section 93120.3(d)(5) specifies that the Executive Order issued to ULEF 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(d)(7) requires ULEF manufacturers to notify ARB in advance if they decide to change to a different urea formaldehyde based resin, and must 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

Ms. Helen Kozhevnikova

July 9, 2014

Page 2

Please note that approval of your Executive Order is contingent upon the use of the resin specified by your resin supplier(s), and ARB must be notified in advance of any changes in resin supply that Vyatsky Plywood decides to make for its ULEF products.

If you have any questions regarding this matter, please contact Angela Csondes at (916) 445-4448 or via email at acsondes@arb.ca.gov or Layla Gonzalez at (916) 324-0354 or via email at lgonzale@arb.ca.gov.

Sincerely,

Peggy L. Janice

for Daniel E. Donohoue, Chief
Emissions Assessment Branch
Transportation and Toxics Division

Enclosure

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

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

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER N-14-073

Relating to ARB Approval for an Exemption from Third Party Certification for Composite Wood Product Manufacturers that use Ultra-low-emitting Formaldehyde Resins under section 93120.3, title 17, California Code of Regulations

VYATSKY PLYWOOD MILL, LTD. (VYATSKY PLYWOOD)

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 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, Vyatsky Plywood (the "applicant") submitted an original application that was received on July 20, 2010;

WHEREAS, the application from Vyatsky Plywood 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 products;

WHEREAS, the application from Vyatsky Plywood contained 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, section 93120.3(d)(5) of the ATCM provides that the Executive Officer shall approve the application is sufficient to demonstrate that the applicant has met the requirements in section 93120.3(d)(1) of the ATCM;

WHEREAS, the original application from Vyatsky Plywood was deemed complete on August 16, 2010, and Vyatsky Plywood was issued Executive Order N-10-073 signed on August 23, 2010, listing their base resin systems in Confidential Attachment A;

WHEREAS, Vyatsky Plywood submitted a request and supplementary documentation to ARB on June 22, 2011, for approval to add additional resin system to Confidential Attachment A;

WHEREAS, the application and request submitted by Vyatsky Plywood demonstrated that their added base resin system is the same type of base resin system as listed in Confidential Attachment A for Executive Order N-10-073;

WHEREAS, Vyatsky Plywood conducted confirmatory testing for the added resin system and provided the results of two primary method tests on ULEF products made with the added resin system that are no greater than 0.04 ppm;

WHEREAS, Vyatsky Plywood provided the required testing data to add another resin system and the required formulation data for the added resin system, it was deemed appropriate that Executive Order N-10-073 be superseded by Executive Order N-10-073A;

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, Vyatsky Plywood submitted an updated application for re-approval to ARB on June 26, 2012;

WHEREAS, Vyatsky Plywood submitted a request and supplementary documentation to ARB on June 26, 2012 with the updated application re-approval and for approval to add additional base resin system to Confidential Attachment A;

WHEREAS, the application and request submitted by Vyatsky Plywood demonstrated that the added base resin system is the same type of base resin system as listed in Confidential Attachment A for Executive Order N-10-073A;

WHEREAS, Vyatsky Plywood conducted confirmatory testing for the added resin system and provided the results of two primary method tests on ULEF products made with the added resin system that are no greater than 0.04 ppm;

WHEREAS, Vyatsky Plywood provided the required testing and formulation data to add a new resin system and the required formulation data for the added resin system, it was deemed appropriate that the resin be added to Executive Order N-12-073;

WHEREAS, the updated application for re-approval from Vyatsky Plywood was deemed complete on July 24, 2012 and signed on July 27, 2012;

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);

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, Vyatsky Plywood submitted a request and supplementary documentation to ARB on June 16, 2014 with the updated application re-approval, and for approval to add additional base resin system to Confidential Attachment A;

WHEREAS, the application and request submitted by Vyatsky Plywood demonstrated that the added base resin system is the same type of base resin system as listed in Confidential Attachment A for Executive Order N-12-073;

WHEREAS, Vyatsky Plywood conducted confirmatory testing for the added resin system and provided the results of two primary method tests on ULEF products made with the added resin system that are no greater than 0.04 ppm;

WHEREAS, Vyatsky Plywood provided the required testing and formulation data to add a new resin system and the required formulation data for the added resin system;

WHEREAS, the Executive Officer approved Vyatsky Plywood's request for re-approval, and it is appropriate that Executive Order N-12-073 be superseded by this Executive Order N-14-073;

NOW, THEREFORE, IT IS ORDERED that Vyatsky Plywood 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. Vyatsky Plywood 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 resin used for the manufacture of ULEF composite wood products by Vyatsky Plywood must be within the ranges specified in section B of Confidential Attachment A of this Executive Order.
3. The application rate of the base resins used for the manufacture of ULEF composite wood products by Vyatsky Plywood must be within the ranges specified in section C of Confidential Attachment A of this Executive Order.
4. Other chemical components of the base resins (such as sizing wax and release wax) used for the manufacture of ULEF composite wood products by Vyatsky Plywood must be within the ranges specified in section D of Confidential Attachment A of this Executive Order.
5. The allowable operating parameters for press temperature and press time for the base resins used to manufacture the ULEF composite wood products by Vyatsky Plywood must be within the ranges specified in section E of Confidential Attachment A of this Executive Order.
6. 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-14-073 supersedes Executive Order N-12-073, which was issued on July 27, 2012;

BE IT FURTHER ORDERED that Vyatsky Plywood 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 Vyatsky Plywood uses the resin for production;


BE IT FURTHER ORDERED that Vyatsky Plywood 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 8th day of July, 2014.

 Reggy L. Tancie

Daniel E. Donohoue, Chief
Emissions Assessment Branch
Transportation and Toxics Division

BE IT FURTHER ORDERED that this Executive Order N-14-073 supersede
Executive Order N-12-012 which was issued on July 27, 2012.

BE IT FURTHER ORDERED that Viasys Plywood may change the resin system
supplier listed in Section A of Confidential Attachment A of this Executive Order if
the new resin system applies the same resin type listed in Confidential
Attachment A of this Executive Order, at least two of the following methods
tests are performed on random samples selected by third party approved third
party certifier and the Chief of the Emissions Assessment Branch of the
Transportation and Toxicology Division is notified before Viasys Plywood uses the
resin for production.

BE IT FURTHER ORDERED that Viasys Plywood must control contamination
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 the Executive Order shall have a duration of
two years from the date this Executive Order is signed and the applicant may apply
for a renewal of the order at the ATCM.

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BE IT FURTHER ORDERED that the applicant must maintain records in
electronic or hard copy form for two years for review by AFB upon request as
specified in section 43120.3(c) of the ATCM.

BE IT FURTHER ORDERED that the applicant must notify the Executive Order
if within 30 days there is any change in their product description
parameters or base resin manufacturer (or suppliers) that does not comply
with any of the requirements, terms or conditions specified in the ATCM of this
Executive Order.

Executed at Sacramento, California this _____ day of _____, 2014.


Daniel E. Donohue, Chief
Emissions Assessment Branch
Transportation and Toxicology Division

Confidential

Attachment A
Formulation Data and Operating Parameters
Page 1 of 4

State of California
AIR RESOURCES BOARD
Executive Order N-14-073

VYATSKY PLYWOOD MILL, LTD. (VYATSKY PLYWOOD)

Section A.

Resin Supplier No. 1: CJSC Metadynea

- Address: Electrozavodskaya Str. 27, Bldg. 2
Moscow, Russia

Commercial Resin Name: Prefere 14J630

- Resin Type: Phenol Formaldehyde

Resin Supplier No. 2: JSC Uralchimplast

- Address: 21, Severnoye Shosse
Sverdlovsk Region, Nizhny Tagil, 622012
Russia

Commercial Resin Name: SFG-3014

- Resin Type: Phenol Formaldehyde

Resin Supplier No. 3: FSE Sverdlov Plant (OOO PiroMax)

- Address: Nizhny Novgorod Region
Dzerzhinsk, Prospekt, Sverdlov 4 Russia

Commercial Resin Name: SFG-3014

- Resin Type: Phenol Formaldehyde

Confidential

Attachment A
Formulation Data and Operating Parameters
Page 2 of 4

State of California
AIR RESOURCES BOARD
Executive Order N-14-073

VYATSKY PLYWOOD MILL, LTD. (VYATSKY PLYWOOD)

Section B.

Base Resin Chemical Formulation (Percent by Weight):

Preferre 14J630 (from CJSC Metadynea)

Phenol:Formaldehyde:Caustic soda Molar Ratio: 1 to 2.2 to 0.6

- Phenol polymer with formaldehyde (CAS No. 9003-35-4)
 - Concentration range = 47 to 50 percent by weight
- Sodium hydroxide (CAS No. 1310-73-2)
 - Concentration range = 6.7 to 7.3 percent by weight
- Free formaldehyde (CAS No. 50-00-0)
 - Concentration range = 0 to 0.1 percent by weight
- Free phenol (CAS No. 108-95-2)
 - Concentration range = 0 to 0.1 percent by weight
- Water (CAS No. 7732-18-5)
 - Concentration range = 42.5 to 46.3 percent by weight

SFG-3014 (from JSC Uralchimplast)

Phenol:Formaldehyde;Caustic Soda Molar Ratio: 1 to 2.5 to 0.8

- Phenol polymer with formaldehyde (CAS No. 9003-35-4)
 - Concentration range = 46 to 52 percent by weight
- Sodium hydroxide (CAS No. 1310-73-2)
 - Concentration range = 6.0 to 7.5 percent by weight
- Free formaldehyde (CAS No. 50-00-0)
 - Concentration range = 0 to 0.1 percent by weight
- Free phenol (CAS No. 108-95-2)
 - Concentration range = 0 to 0.1 percent by weight
- Water (CAS No. 7732-18-5)
 - Concentration range = 40.3 to 48.0 percent by weight

Confidential

Attachment A
Formulation Data and Operating Parameters
Page 3 of 4

State of California
AIR RESOURCES BOARD
Executive Order N-14-073

VYATSKY PLYWOOD MILL, LTD. (VYATSKY PLYWOOD)

Section B.

SFG-3014 (from FSE Sverdlov Plant)

Phenol:Formaldehyde:Sodium hydroxide Molar Ratio: 1 to 2.1 to 0.8

- Phenol polymer with formaldehyde (CAS No. 9003-35-4)
 - Concentration range = 46 to 52 percent by weight
- Sodium hydroxide (CAS No. 1310-73-2)
 - Concentration range = 6.0 to 7.5 percent by weight
- Free formaldehyde (CAS No. 50-00-0)
 - Concentration range = 0.1 to 0.1 percent by weight
- Free phenol (CAS No. 108-95-2)
 - Concentration range = 0.1 to 0.1 percent by weight
- Water (CAS No. 7732-18-5)
 - Concentration range = 40.3 to 47.8 percent by weight

Confidential

Attachment A
Formulation Data and Operating Parameters
Page 4 of 4

State of California
AIR RESOURCES BOARD
Executive Order N-14-073

VYATSKY PLYWOOD MILL, LTD. (VYATSKY PLYWOOD)

Section C.

Base Resin Application Rate (Pounds per 1,000 square feet):

- Hardwood Plywood – Veneer Core (min/max): 15.2 – 17.3

Section D.

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

- Calcium carbonate: 0.02 to 0.09 pounds
- Flour: 0.02 to 0.09 pounds
- Water: Up to 0.18 pounds

Section E.

Allowable Operating Parameters:

- Press Temperature (°C)
 - Hardwood Plywood – Veneer Core (min/max): 120 to 130
- Press Time (Minutes):
 - Hardwood Plywood – Veneer Core (min/max): 8 to 45

Section F.

Product Names & Types Authorized in Executive Order N-14-073:

- Hardwood plywood (thickness range = 4 to 40 mm)