65402-2 (05-12-2010 (1/7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 12 2010

EPA United States Environmental Protection Agency **Office of Pesticide Programs**

FMC Corporation
Peroxygens Division
1735 Market Street
Philadelphia, PA 19103

AGENT: Keller and Heckman LLP
1001 G Street, N.W., Suite 500 West
Washington, D. C. 20001

Attention: Catherine Rice

Subject: VigorOx Antimicrobial Agent
EPA Registration No. 65402-2
Notification Dated April 29, 2010

This will acknowledge receipt of your notification, submitted under the provisions of FIFRA Section 3(c)(9).

Proposed Notification

- Revise Container Disposal language per PR Notice 2007-4.

(Replaces the March 11, 2010 label refillable containers amendment.)

General Comments

Based on a review of the submitted material, the following comments apply:

The Notification is in compliance with PR Notice 98-10 and is acceptable. This information has been added to your file.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6341.

Sincerely

Marshall Swindell
Product Manager (33)
Regulatory Management Branch 1
Antimicrobials Division (7510P)

Please read Instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060. Approval expires 2-28-95

EPA

United States
Environmental Protection Agency
Washington, DC 20460

☐ **Registration**
☐ **Amendment**
☑ **Other**

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
VigorOx Antimicrobial Agent	Marshall Swindell	☑ None ☐ Restricted
4. Company/Product (Name)	PM#	
65402-2	Team 33	

5. Name and Address of Applicant *(Include ZIP Code)*
FMC Corporation
Peroxygens Division
1735 Market Street
Philadelphia, PA 19103

☐ *Check if this is a new address*

6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No._____

Product Name_____

Section II

☐ Amendment - Explain Below
☐ Resubmission in response to Agency Letter dated_____.
☑ Notification - Explain below.
☐ Final printed labels in response to Agency Letter dated _____.
☐ "Me Too" Application.
☐ Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification: Revised Container Disposal language per PR Notice 2007-4

Please refer to the attached cover letter for additional information.
This notification replaces the refillable containers amendment submitted on March 11, 2010.

Section III

1. **Material This Product Will Be Packaged In:**

Child-Resistant Packaging	Unit Packaging		Water Soluble Packaging		2. Type of Container
☐ Yes* ☐ No	☐ Yes ☐ No		☐ Yes ☐ No		☐ Metal ☐ Plastic ☐ Glass ☐ Paper ☐ Other (Specify) _____
	If "yes," Unit Package wgt.	No. per container	If "Yes," Package wgt.	No. per container	

* ***Certification must be submitted.***

3. Location of Net Contents Information	4. Size(s) of Retail Container	5. Location of Label Directions
☐ Label ☐ Container		☐ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product ☐ Lithograph ☐ Paper glued ☐ Stenciled ☐ Other (_____)

Section IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this applicaiton.)*

Name	Title	Telephone No. (Include Area Code)
Catherine Rice	Scientist, Keller and Heckman, LLP	202-434-4145

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false for misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title
Catherine R.	Agent for FMC Corporation
4. Typed Name	5. Date
Catherine Rice	4-29-2010

KELLER AND HECKMAN LLP
Serving Business through Law and Science®

1001 G Street, N.W.
Suite 500 West
Washington, D.C. 20001
tel. 202.434.4100
fax 202.434.4646

Writer's Direct Access
Catherine Rice
(202) 434-4145
Rice@khlaw.com

April 29, 2010

Via Messenger

Document Processing Desk (NOTIF)
US Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

To: Marshall Swindell (7510P)
Product Manager 33
Regulatory Management Division Branch I

Re: Registrant: FMC Corporation, Peroxygens Division
Product: VigorOx Antimicrobial Agent (EPA Reg. No. 65402-2)
Notification of Revised Container Disposal Language per PR Notice 2007-4
Replaces March 11, 2010 label amendment

Dear Marshall:

On behalf of our client, FMC Corporation, Peroxygens Division, we are notifying the EPA of revised container disposal language per PR Notice 2007-4. This notification covers both refillable and nonrefillable containers and is consistent with the language in the PR Notice. **This notification replaces the label amendment that was submitted on March 11, 2010.** Specifically, this new language is:

> **Nonrefillable containers less than 5 gallons**. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.
>
> **Nonrefillable containers greater than or equal to 5 gallons [Deletes the upper limit]**. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand

the container on its end and tip it back and forth several times. Turn the container over into its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use for disposal. Repeat this procedure two more times.

All Refillable containers. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

No other changes to the label are being made. Attached are five copies of the proposed label along with one highlighted label.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Please contact me at the above number if you have any questions.

Sincerely,

Catherine Rice
Scientist

Cc: LuAnn Maloney, FMC
John Dubeck

VigorOx® Antimicrobial Agent

EPA Registration No. 65402-2
EPA Est. No. 00279-NY-003

VigorOx® Antimicrobial Agent is for biofouling and slime control in :

- **Pulp and paper mill systems**
- **Recirculating cooling water systems**
- **Coating preservation**
- **Dispersed pigment preservation**

For Industrial Use Only

Active Ingredients:	
Peroxyacetic Acid	**5.1%**
Hydrogen Peroxide	**21.7%**
Inert Ingredients:	**73.2%**
Total	**100.0%**

KEEP OUT OF REACH OF CHILDREN

DANGER

See side panel for additional precautionary statements

FMC Corporation
Peroxgens Division
1735 Market Street
Philadelphia, Pennsylvania 19103

Precautionary Statements:
Hazards to Humans and Domestic Animals

Danger - Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed. May be fatal if absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses, clothing and chemical resistant gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash before reuse.

Physical and Chemical Hazards. Strong oxidizing agent. Mix only with water. VigorOx® Antimicrobial Agent is not combustible, however, at temperatures exceeding 156°F, decomposition occurs releasing oxygen. The oxygen released could initiate or promote combustion or other materials.

Environmental Hazards – This pesticide is toxic to birds, mammals, fish and aquatic life. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your state Water Board or Regional Office of the EPA.

First Aid	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If swallowed	• Call poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do hot induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.	

Storage and Disposal

Storage

Never return VigorOx® to the original container after it has been removed. Avoid all contaminants especially dirt, caustic, reducing agents, and metals. Contamination and impurities will reduce shelf life and can induce decomposition. In case of decomposition, isolate container, douse container with cool water and dilute VigorOx® with large volumes of water.
Avoid damage to containers. Keep container closed at all times when not in use. Keep container out of direct sunlight. To maintain product quality, store at temperatures below 86°F. Do not store on wooden pallets.

Procedure for Leak or Spill
Stop leak if this can be done without risk. Shut off ignition sources: no flames, smoking, flares or spark producing tools. Keep combustible and organic materials away. Flush spilled materials with large quantities of water. Undiluted material should not enter confined spaces.

Disposal

Pesticide Disposal
If material has been spilled, an acceptable method of disposal is to dilute with at least 20 volumes of water followed by discharge into suitable treatment system in accordance with all local, state, and Federal environmental laws, rules, regulations, standards, and other requirements. Because acceptable methods of disposal may vary by location, regulatory agencies should be contacted prior to disposal.
VigorOx® which is to be discarded, should be disposed of as hazardous waste after contacting the appropriate local, state, or Federal agency to determine proper procedures.

Container Disposal
Nonrefillable containers less than 5 gallons. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Nonrefillable containers greater than or equal to 5 gallons [Deletes the upper limit]. Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over into its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use for disposal Repeat this procedure two more times. Empty drums are not returnable to FMC unless special arrangements have been made. Dispose of drums in accordance with local, state, and Federal regulations.

All Refillable containers. Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Return to FMC for reuse.

Directions For Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Biofouling Control In Pulp and Paper Mill Systems
For use in the manufacture of paper and paperboard intended for food and non-food contact. VigorOx® Antimicrobial Agent can be used to control bacterial, fungal and yeast growth in pulp, paper and paperboard mills.

1. Severely fouled systems should be cleaned before initial treatment with VigorOx® Antimicrobial Agent. VigorOx® should be added directly to the system and not mixed with any other chemicals or additives. Other chemicals can be added separately. Contamination with other chemicals could result in product decomposition.

2. Add VigorOx® Antimicrobial Agent at a point in the system where it can be mixed uniformly with the pulp, e.g., the beater, hydropulper, fan pump, broke pump, etc.

3. Intermittent feed method: Apply 0.5 lb. to 4.5 lbs. (7 to 65 fluid ounces) of VigorOx® per ton (dry basis) of pulp or paper produced, for two to three hours every eight hour shift. Maintain a concentration that provides adequate control. Daily rate could change depending on the severity of the biofoulling.

4. Continuous feed method: Initially, use the intermittent feed method to achieve control. When control is accomplished apply VigorOx® continuously at the rate determined adequate for intermittent control. Then reduce the rate of addition to the lowest level sufficient to maintain control. Depending on the severity of the biofouling, control usually can be maintained using a continuous rate of 0.3 to 4.5 lb. (4 to 65 fluid ounces)
of VigorOx® solution per ton (dry basis) of pulp or paper produced on a continuous basis. This will provide 10 to
110 ppm of peroxyacetic acid and 35 to 490 ppm of hydrogen peroxide.

Control of Bacteria and Fungi in Dispersed Pigments
VigorOx® Antimicrobial Agent can be used to control bacteria and fungi in the manufacture and storage of dispersed pigments such as kaolin clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate and kleselguhr used in pain and paper production.

1. Apply 0.3 to 1.5 lb. (4 to 21 fluid ounces) (135 to 680 grams of VigorOx® solution to each 1, 000 lb. (454 kg) of fluid. This will provide 300 to 1500 ppm of product. (15 to 80 ppm peroxyacetic acid and 70 to 340 ppm hydrogen peroxide)

Control of Slime Forming Bacteria in Recirculating Cooling Water Systems (Cooling Towers, Evaporative Condensers)
1. Severely fouled system should be cleaned before adding the VigorOx® solution. VigorOx® should be added directly to the system and not mixed with any other chemicals or additives. Other chemicals should be added separately. Contamination with other chemicals could result in product decomposition.

2 .Add the VigorOx® solution at a point in the system where uniform mixing and even distribution will occur, for example the cooling tower basin sump.

3. Intermittent feed method: When the system is noticeably fouled apply 1.0 to 1.5 lb (14 to 21 fluid ounces) of VigorOx® solution per 1000 gallons of water in the system. Repeat until control is achieved. When microbial control is evident, add 1.0 lb. (14 fluid ounces) of VigorOx® solution per 1000 gallons of water in the system every day, or as needed to maintain control. The daily dose rate could vary depending upon the severity of the biofouling.

4. Continuous feed method: Initial dose – When the system is just noticeably fouled, apply 1.0 to 1.5 lb. (14 to 21 fluid ounces) of VigorOx® solutions per 1,000 gallons of water in the system. When microbial control is achieved, start adding VigorOx® solution continuously at a rate of 1.5 lb (21 fluid ounces) per 1,0000 gallons of water. (This will provide 10 ppm peroxyacetic acid and 40 ppm hydrogen peroxide). Then reduce the rate of addition to a level that is sufficient to maintain control. The dose rate may have to be adjusted to account for losses due to blowdown and evaporation.

Control of Bacteria and Fungi in Coating Preservation

Not for use in the manufacture of materials intended for food contact. VigorOx® Antimicrobial Agent can be used as an in-container preservative for the control of bacteria and fungi in water-based coating such a paper coatings.

1. Add 0.3 to 1.5 lb. (4 to 21 fluid ounces/135 to 680 grams) of VigorOx® solution to each 1,000 lbs. (454 kg) of water. This will provide 300 to 1500 ppm of product (15 to 80 ppm peroxyacetic acid and 70 to 340 ppm hydrogen peroxide).

In all applications always prepare a new solution daily to ensure effectiveness. Do not re-use solutions. Dispose of all used solutions.

EMERGENCY TELEPHONE NUMBERS
(24 HOURS)
MEDICAL: COLLECT 303-595-9048
TRANSPORTATION: 800-424-9300
OTHER: COLLECT 716-879-0400

ESL100803 REV042910