53345-23 (9/24/2014 (1/10

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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION
SEP 24 2014

Ms. Christina M. Swick, Agent For: ERCO Worldwide
Lewis & Harrison Consultants in Government Affairs
122 C Street, N.W. Suite 505
Washington, DC 20001

Subject: Ercopure 25: EPA Reg. No. 53345-14
Sodium Chlorite Solution 7.5: EPA Reg. No. 53345-19
Ercopure 37: EPA Reg. No. 53345-21
Sodium Chlorite Solution 31: EPA Reg. No. 53345-22
Ercopure 31: EPA Reg. No. 53345-23
Application Date: September 8, 2014
Application Receipt: September 8, 2014

Dear Ms. Swick:

This acknowledges receipt of your Notification application, submitted under the provisions of FIFRA 3(c) 9 and PR Notice 98-10.

Purpose of the Notification:

The purpose of this Notification is to update the EPA Establishment Numbers. Specifically, we are changing EPA Establishment number 70124-LA-001 to EPA Establishment 86565-LA-002.

General Comments:

Based on the review of the information submitted, the following comments apply.

The Notification is **Acceptable.**

A copy of the accepted Notification is attached in **Regulatory File Jacket 53345-23** for future reference.

If you have questions or concerns with regard to this Agency Letter, please contact Killian Swift by email at **Swift.Killian@epa.gov** and by telephone at **703-308-6346.** When you are submitting information or data in response to this Agency Letter, please send a copy of this Agency Letter with your response in order to facilitate processing.

Sincerely yours,

for Demson Fuller
EPA Product Manager 32
Regulatory Management Branch II
Antimicrobials Division 7510P

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Please read instructions on reverse before completing form. Form Approved, OMB No. 2070-0060, Approval expires 05-31-98

EPA United States **Environmental Protection Agency** Washington, DC 20460

☐ **Registration** ☐ **Amendment** ☒ **Other: Notification**

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
53345-23	**Demson Fuller**	☒ None ☐ Restricted
4. Company/Product (Name) **ERCOPURE 31**	PM# **32**	
5. Name and Address of Applicant *(Include ZIP Code)* **ERCO Worldwide 302 The East Mall, Suite 200 Toronto, Ontario M9B 6C7 CANADA** ***PLEASE SEND ALL CORRESPONDENCE TO "CONTACT POINT" LISTED BELOW*** ☐ *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 IN ACCORDANCE WITH PR NOTICE 98-10

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 95-2 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be the subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Signature: Christina M. Swick **Date: September 8, 2014**

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)
***Certification must be submitted**	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt. / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☐ Label -or- ☐ 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 application)*

Name	Title	Telephone No. (Include Area Code)
Christina M. Swick, Lewis & Harrison, LLC, 122 C Street NW, Ste. 505, Washington, DC 20001	**Agent**	**202-393-3503 x. 16**

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 or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature	3. Title	6. Date Application Received
Christina M. Swick	**Agent**	**(Stamped)**
4. Typed Name **Christina M. Swick**	5. Date **September 8, 2014**	

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete **White- EPA File Copy (original) Yellow- Applicant Copy**

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LEWIS & HARRISON
Consultants in Government Affairs

122 C Street, N.W. Suite 505
Washington, DC 20001
telephone 202.393.3903
fax 202.393.3906

September 8, 2014

HAND DELIVERED

Antimicrobials Division (Mail Code 7504P)
Office of Pesticide Programs
Document Processing Desk [NOTIFY]
U.S. Environmental Protection Agency
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202

ATTN: **Demson Fuller**
Product Manager, Team 32

SUBJECT: **Notification of Changes per PR Notice 98-10**
ERCO Worldwide
***ERCOPURE 25* (EPA Reg. No. 53345-14)**
***Sodium Chlorite Solution 7.5* (EPA Reg. No. 53345-19)**
***ERCOPURE 37* (EPA Reg. No. 53345-21)**
***Sodium Chlorite Solution 31* (EPA Reg. No. 53345-22)**
***ERCOPURE 31* (EPA Reg. No. 53345-23)**

Dear Mr. Fuller:

On behalf of ERCO Worldwide, I am notifying the Agency of a minor label change to the five (5) products listed in the subject line above. The purpose of this notification is to update the EPA Establishment Numbers. Specifically, we are changing EPA Establishment Number 70124-LA-001 to EPA Establishment Number 86565-LA-002.

Please find enclosed, for each product, the following documents to support this notification:

1) Pesticide Application form;
2) One (1) copy of the proposed product label with the changes highlighted; and,
3) Three (3) copies of the proposed product label.

If you have any questions or comments, please contact me at 202-393-3903 ext. 16 or cswick@lewisharrison.com.

Sincerely,

Christina M. Swick

Christina M. Swick
Agent for ERCO Worldwide

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ERCOPURE 31

Sodium Chlorite Solution

For Use in Generating Chlorine Dioxide to Control Microorganisms in Municipal Drinking Water

Active Ingredient	
Sodium Chlorite	31.0%
Other Ingredients	69.0%
Total	100.0%

NOTIFICATION
Date Received:
Reviewed By:
09-24-14
KillianSwift

KEEP OUT OF REACH OF CHILDREN

DANGER

[See Side Panel for Additional Precautionary Statements]

FIRST AID

IF IN EYES: Hold eye open rinse slowly and gently with plenty of water for at least 15 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing and shoes. Rinse skin immediately with plenty of water for 15-20 minutes. Call 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 mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the 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.

EPA Reg. No.	53345-23
EPA Est. No.	53345-CAN-001
	53345-CAN-004
	86565-LA-002

Net Contents:

ERCO Worldwide
302 The East Mall, Suite 200
Toronto, Ontario M9B6C7
Canada

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Precautionary Statements
Hazard to Humans and Domestic Animals

DANGER: Highly corrosive, causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or clothing. Wear goggles or face shield, use only Neoprene gloves and use only thoroughly clean dry utensils when handling. May be Fatal if swallowed. ***Irritating to Nose and Throat. Avoid breathing fumes.*** Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

Environmental Hazards

This product is toxic to fish and other aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the 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.

Physical or Chemical Hazards

Strong oxidizing agent. Mix or dilute with water only. Mixing with acids, or alcohol, or other chemicals may cause evolution of chlorine and chlorine dioxide gas mixture which is toxic and may be explosive. Combustible materials contaminated with ERCOPURE 31 may burn rapidly. Keep handling areas and equipment clean and free of oils, greases, combustibles and dust. Do not contaminate product with garbage, dirt, organic matter, paint products, solvents, acids, vinegar, beverages, oils, pine oils, dirty rags, or other foreign matter. Do not expose to hot surfaces, sparks or open flame.

NSF
Certified to NSF/ANSI 60

CHLORINE DIOXIDE GENERATION

ERCOPURE 31 is a precursor for the generation of chlorine dioxide. DO NOT ADD ERCOPURE 31directly to the system being treated. Chlorine dioxide solutions can be generated from ERCOPURE 31 by several common methods including:

1. The chlorine method which utilizes a ERCOPURE 31 and chlorine gas, or
2. The hypochlorite method which utilizes ERCOPURE 31, a hypochlorite solution and an acid or,
3. The Acid-Chlorite method which utilizes ERCOPURE 31 and an acid, or
4. The electrolytic method which utilizes ERCOPURE 31, with sodium chloride as needed

EROCPURE 31 can also be used to form acidified sodium chlorite solutions by mixing the product with Generally Recognized As Safe (GRAS) acids such as citric, phosphoric or acetic acid. Add the generated chlorine dioxide solution to a point in the system which ensures uniform mixing. Your ERCO Worldwide representative can guide you in the selection, installation and operation for feed systems.

DIRECTIONS FOR USE

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

Method of Application

Chlorine dioxide generation must take place only under controlled conditions in a chlorine dioxide generator. These generators react with ERCOPURE 31 with either chlorine or a chlorine solution and hydrochloric acid producing an aqueous solution of chlorine dioxide. This solution is then added at a point in the system to be treated which ensures uniform mixing.

Alternatively, chlorine dioxide can be generated electrically by anordic reduction.

Do not apply ERCOPURE 31 directly to the system being treated. Follow all instructions in the chlorine dioxide generator manual.

APPLICATIONS

MUNICIPAL DRINKING WATER DISINFECTION

For municipal water systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. Normal target residual concentrations are in the 0.20-0.75 ppm range. Monitor the distribution system to ensure that the chlorite concentration does not exceed its maximum contaminant level (MCL) of 1 mg/L and that chlorine dioxide does not exceed its maximum residual disinfectant level (MRDL) of 0.8 mg/L.

WASTEWATER DISINFECTION

For most municipal systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. Monitor the distribution system to ensure that the chlorite concentration does not exceed the maximum contaminate level (MCL) of 1 mg/L and that chlorine dioxide does not exceed its maximum residual disinfection level (MRDL) of 0.8 mg/L. The concentration of total residual oxidants (chlorine dioxide, chlorite and chlorate) should be monitored such that it does not exceed 1.0 ppm in the distribution system. For wastewater and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.

POTABLE WATER DISINFECTION

For most municipal systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. Monitor the distribution system to ensure that the chlorite concentration does not exceed the maximum contaminate level (MCL) of 1 mg/L and that chlorine dioxide does not exceed its maximum residual disinfection level (MRDL) of 0.8 mg/L. The concentration of total residual oxidants (chlorine dioxide, chlorite and chlorate) should be monitored such that it does not exceed 1.0 ppm in the distribution system. For wastewater and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.

POTABLE WATER SYSTEMS

Nitrification: to control the build-up of nitrification in the water distribution system. Utilize a chemical metering system to add this product so that the resulting dose of chlorine dioxide or sodium chlorite to control nitrification does not exceed the MRDL of 0.8 mg/L for ClO2, nor the MCL of 1.0 mg/L for chlorite ion.

Use of this product in public water systems (drinking water utilities) triggers monitoring and compliance requirements under 40 CFR 141. Among other requirements the user of the product is required to conduct daily monitoring for chlorine dioxide and chlorite at the point of addition and to comply with standards for chlorine dioxide and chlorite. The user of this product is required to contact State or primary drinking water programs to determine specific monitoring, compliance, reporting, and record-keeping requirements in order to avoid adverse human health effects and/or non-compliance with such requirements.

FOOD PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES and FOOD PLANT PROCESS WATER

For microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers and retort cooling water, apply ERCOPURE 31 through a chlorine dioxide generation system to achieve a chlorine dioxide residual concentration ranging from 0.25 to 5.0 ppm.

Chlorine dioxide generated from ERCOPURE 31 may also be used as a water sanitizer for fruit and vegetable washing and cut and peeled potato products without a subsequent potable water rinse requirement, provided that the concentration of total residual oxidants meet the residual limitation of $\leq$ 1.0 ppm.

Residual concentrations up to 5.0 ppm chlorine dioxide in process water may be used for washing whole uncut and unpeeled fruits and vegetables although a final potable water rinse is required if the residual exceeds 1ppm.

Potatoes, including those which have been peeled or cut, may be treated with sufficient chlorine dioxide to produce a residual concentration of up to 5.0 ppm provided this is followed by a potable water rinse.

POULTRY PROCESSING WATER

Use ERCOPURE 31 to generate chlorine dioxide for use as an antimicrobial agent in water used in poultry processing in an amount not to exceed 3 ppm residual chlorine dioxide as determined by an appropriate method.

SANITIZATION OF FOOD-CONTACT SURFACES IN FOOD-PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES: Note: Only the chlorine and hypochlorite methods described above can be used to generate chlorine dioxide for sanitization of food-contact surfaces.

Use ERCOPURE 31 to generate chlorine dioxide for use as a terminal no-rinse sanitizer for food-contact surfaces, food-processing equipment and utensils. Prior to application, remove gross food particles and soil by a pre-flush, or pre-scrape, and, when necessary, pre-soak treatment. Then thoroughly wash all equipment, surfaces and utensils with a suitable detergent or cleaner, followed by a potable water rinse. Dilute the chlorine

dioxide solution generated from the chlorine dioxide generator with potable water to achieve a use-solution of at least 100 ppm but not more than 200 ppm available chlorine dioxide. A contact time of at least one minute is required for sanitization. Allow the sanitizing solution to thoroughly drain and dry from all equipment and surfaces prior to recontact of the sanitized surface with food or feed items.

GENERAL INDUSTRIAL PROCESS WATER TREATMENT (OILFIELD INJECTION WATER, WHITE WATER PAPER MILL SYSTEMS, AND RECIRCULATING COOLING TOWERS)

Use ERCOPURE 31 to generate chlorine dioxide for the control of microbial slime in the above water systems. In order to achieve adequate control, the chlorine dioxide residual concentration should be between 0.25 and 5.0 ppm.

ONCE-THROUGH COOLING WATER SYSTEMS

Control of mollusks can be effectively accomplished using ERCOPURE 31 as directed in commercial and industrial once-through cooling water systems. ERCOPURE 31 may be fed on a continuous or slug basis depending on the degree of system fouling.

Slug Dose: Add 34 to 168 lbs. of chlorine dioxide per million gallons of water (5 to 25 ppm).

Continuous Dose: Add 2 to 13 lbs. of chlorine dioxide per million gallons of water (0.25 TO 2 PPM).

DIRECTIONS FOR CONTROLLING THE GROWTH OF ALGAE IN RECIRCULATING COOLING WATER TOWERS

1. Clean badly fouled systems before starting treatment. 2. When algae are visible, add an initial dosage of 6.6 fl. oz. of Sodium Chlorite per 1,000 gals of water in the system. Repeat if necessary until control is evident. 3. Where algae control is evident, use a subsequent dose of 3.3 fl. oz. of Sodium Chlorite solution per 1,000 gals of water in the system twice a week or as needed to maintain control. 4. Add Sodium Chlorite directly to the cooling tower drip pan (cold water basin) near the inlet to the recirculating pump.

DIRECTIONS FOR USE IN THE MECHANICAL OR ELECTROLYTIC GENERATION OF CHLORINE DIOXIDE AS A DISINFECTANT, OR FOR MICROORGANISM OR MOLLUSK CONTROL AND AS A CHEMICAL OXIDANT IN AQUATIC SYSTEMS

Feed requirements: Feed rates of 31% Active Sodium Chlorite Solution will depend on the severity of contamination and the degree of control desired. The exact dosage will depend on the size of the system and residual necessary for effective control. 31% Active Sodium Chlorite Solution is typically diluted at the point of use to prepare a 3% to 25% active aqueous solution for use in chlorine dioxide generators.

Some examples of industrial applications of chlorine dioxide include:

- Potable water disinfection and removal of sulfide.
- Control of bacterial slime and algae and mollusks in industrial recirculating and one-pass cooling systems.
- Biocontrol in food processing flumes, water-using equipment, cooling water, and recycled waters.
- Disinfection of sewage and plant wastes.
- Destruction of phenolics, simple cyanides and sulfides by chemical oxidation.
- Bacterial slime control in white water paper mill systems.
- Bacterial control in oil well and petroleum systems.

BACTERIAL SLIME CONTROL IN PAPERMILLS

Chlorine dioxide generated from sodium chlorite is effective for use in controlling microbiological growth in white water paper mill systems. The required dosages will vary with the degree of microbiological and process

contamination present. Depending on the specific requirements of the system, sodium chlorite should be applied continuously or intermittently through a chlorine dioxide generating system to achieve a chlorine dioxide residual concentration between 0.1 and 5.0 ppm. Intermittent treatments should be repeated as often as necessary to maintain control.

BACTERIAL CONTROL IN OIL WELLS AND PETROLEUM SYSTEMS

Chlorine dioxide is effective in the remediation of bacterial and sulfide contamination commonly found in oilfield production, injection and disposal fluids. The required dosages will vary with process conditions. Sodium chlorite may be applied either continuously or intermittently through a chlorine dioxide generating system to oil well production water as it is separated from the oil, and before it is re-injected into the well.

For continuous feeds, chlorine dioxide may be applied at dosages slightly higher than sulfide's oxidative demand as determined by a demand study. For intermittent treatment, chlorine dioxide should be applied at a shock dosage of 200-3000 ppm.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE:

Store upright in cool, dry and well-ventilated place. Avoid excessive heat or freezing. Protect from contact with other chemicals; avoid storage with organic chemicals, acids, reducers and combustible material. Keep container tightly closed when not in use. In case of spills, flush and drain promptly to sewer with large quantities of water. Do not allow liquid to dry out because this could present a fire hazard. If fire occurs, extinguish with large volume of water. Do not skid or slide drums.

PESTICIDE DISPOSAL:

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING & DISPOSAL:

Tank trucks and Railcars: Return for reuse. All valves must be closed tight and closures or caps secured.

Containers equal to or less than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse (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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning If burned, stay out of smoke.

Containers over 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse (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 onto 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 or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning If burned, stay out of smoke.