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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ana Rodriguez-Koster
Agent for Clearwater International, LLC
Lewis & Harrison
122 C Street, NW
Suite 740
Washington, DC 20001

AUG - 5 2009

Subject: **BIO-CLEAR 1000**
EPA Registration No. 59106-1
Application Date: April 16, 2009
Receipt Date: April 20, 2009

Dear Ms. Koster:

The following amendment, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) 3 (c) 7 A as amended, is acceptable with comments.

Proposed Amendment:

Add the following use sites:

1. Reverse Osmosis Systems
2. Hydrotesting
3. Publicly-Owned Treatment Works
4. Process, Product, Wastewater & Recycle Clean-up
5. Industrial Wastewater Systems
6. Equipment Cleaning

General Comments

1. Reorder your First Aid Statement as follows to read from most to least toxic route of exposure as stated in PR Notice 2001-1:

IF IN EYES
IF ON SKIN OR CLOTHING
IF SWALLOWED
IF INHALED

2. Revise the emergency information section of the first aid statement to read as follows:

- Have the product container or label with you when calling a poison control center or doctor or going for treatment.
- For emergency information call the National Pesticides Information Center at 1-900-858-7378, 6:30 AM to 4:30 PM Pacific time (PT), seven days a week. During other times, call the poison control center 1-800-222-1222

3. Wherever the word "should" appears replace with "must" under the Reverse Osmosis System section of your label

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

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- 4. Revise your opening sentence under the Process, Product, Wastewater & Recycle Clean Up section of your label, by removing "may be", and replacing with "is" as per PR Notice 2005. Also in that section delete the word "bring" and replace with the word "being". The last sentence of that label section must read "Must mix thoroughly."

A stamped copy of the accepted labeling has been inserted in your file for future reference.

Should you have any questions concerning this letter, you may contact me by telephone at (703) 308-6415 or by e-mail at lantz.tracy@epa.gov or Stacey Grigsby by telephone at (703) 305-6440 or by email at grigsby.stacey@epamail.epa.gov during the hours of 8:00 am to 4:00 pm EST. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely,

Tracy Lantz
(Acting) Product Manager (34)
Regulatory Management Branch II
Antimicrobials Division (7510P)

Enclosures: Stamped Label

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SURNAME							
DATE							

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS
DANGER. Corrosive. Causes irreversible eye damage. May be fatal if swallowed or inhaled. Harmful if absorbed through skin. Do not get in eyes, or on clothing. Do not breathe dust. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N-, R-, P or HE filter. Wear goggles or face shield and protective clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARD

This pesticide is toxic to fish. 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.



CLEARWATERTM

Engineered Chemistry[®]

BIO-CLEAR[®] 1000

A MICROBIAL BACTERICIDE, FUNGICIDE, ALGAEICIDE AND SLIMICIDE IN TREATING NON-MARINE, OILFIELD DRILLING AND RECOVERY APPLICATIONS

ACTIVE INGREDIENT:

2, 2-Dibromo-3-Nitropropionamide.....	98%
Inert Ingredients.....	2%
TOTAL:	100%

Keep Out of Reach of Children
DANGER

First Aid	
If in eyes	<ul style="list-style-type: none"> ● 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. ● Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> ● 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.
If inhaled	<ul style="list-style-type: none"> ● 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 on skin or clothing	<ul style="list-style-type: none"> ● 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.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

ACCEPTED WITH COMMENTS
 EPA Letter Data

EPA Reg. No. 59106-1 EPA Est. No. 59106-PA-1
 Net contents: LBS./ KG.

Manufactured [by] [for]:
 CLEARWATER INTERNATIONAL, LLC
 1000 West Oak Boulevard, Suite 1-148
 Houston, TX 77027

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended for the pesticide

Revised 4/16/2009

DIRECTION FOR USE

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

BIO-CLEAR[®] 1000 is packaged in 1 pound water soluble bags, which are enclosed in outer protective mylar bags. For application of product simply open the mylar bag, remove the inner package, and apply the product in accordance with the prescribed dose rate. Ensure the use of proper personal protective equipment prior to handling this product.

NON-MARINE, ENHANCED OIL RECOVERY SYSTEMS

For controlling slime-forming bacteria, sulfide-producing bacteria, yeast, and fungi in oil field water, polymer of micellar floods, water-disposal systems or other oil field water systems, add 6-54 ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of water) depending on the severity of contamination.

CONTINUOUS FEED METHOD: When system is noticeably fouled, add 6-54ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of water) continuously until the desired degree of control is achieved. Subsequently, treat with 6-54ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of water) continuously or as needed to maintain control.

INTERMITTENT OR SLUG METHOD: When system is noticeably fouled, or to maintain control of the system, add 6-54ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of water) intermittently for 4 - 8 hours per day, and from 1- 4 times per week, or as needed depending on the severity of contamination. Addition of **BIO-CLEAR[®] 1000** may be made at the free water knockouts, before or after the injection pumps and injection well headers.

NOTE: For control of bacteria, yeast, and fungi in aqueous solutions of biopolymer used in flooding operations, add 6-54ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of water).

COMPLETION AND WORKOVER FLUIDS

BIO-CLEAR[®] 1000 antimicrobial should be added to a completion and workover fluid at a point of uniform mixing such as a circulating tank. Add antimicrobial 6-54ppm (1-9 pounds per 476 barrels or 20,000 gallons of water) to freshly prepared fluid depending on the severity of the contamination. Circulate the workover fluid system until the fluid returns clear, shut the system down and idle for several hours. Remove the workover fluid. The well should be ready for productive use.

DRILLING MUDDS

BIO-CLEAR[®] 1000 antimicrobial should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank. **INITIAL TREATMENT:** Add 6-54ppm (1-9 pounds per 476 barrels or 20,000 gallons of water) to freshly prepared drilling fluid depending on the severity of contamination. **MAINTAIN DOSAGE:** As the total volume of the system increases due to increased well depths, maintain 6-54ppm level by adding 1-9 pounds per 476 barrels or 20,000 gallons of fluid, or as needed, depending on the severity of contamination.

PACKER FLUIDS

BIO-CLEAR[®] 1000 antimicrobial should be added to a packer fluid at point of uniform mixing such as a circulating holding tank. Add 6-54ppm antimicrobial (1-9 pounds per 476 barrels or 20,000 gallons of water) to freshly prepared drilling fluid depending on the severity of contamination. Seal the treated packer fluid in the wall between the casing and production tube.

WATER FLOODS

BIO-CLEAR[®] 1000 should be added to a flood water system at point of uniform mixing such as the area of addition to make up water to the holding tank. **INITIAL TREATMENT:** When the system is noticeably contaminated, add 6-54 ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of water). Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 6-54 ppm **BIO-CLEAR[®] 1000** (1-9 pounds per 476 barrels or 20,000 gallons of flood water) weekly, or as needed to maintain control.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS

Add **BIO-CLEAR[®] 1000** to the basin (or at any other point of uniform mixing). Addition should be made with a metering pump; it may be continuous or intermittent, depending on the severity of the contamination when treatment is begun, and the retention time in the system. Optimum performance with this product is attained by continuous or intermittent treatment. If "shock" treatment is used, the blowdown should be discontinued for 24-48 hours.

FOR CONTROL OF BACTERIA

Add sufficient **BIO-CLEAR[®] 1000** to reach a concentration in the system of 0.2-2.3 ppm active ingredient, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD: Initial dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR[®] 1000** to reach a concentration in the system of 1.2-2.3 ppm active ingredient. Repeat until control is achieved. Subsequent dose: When microbial control is evident, add 0.6-2.3 ppm **BIO-CLEAR[®] 1000** to the system every 4 days, or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD: Initial dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR[®] 1000** to achieve a concentration in the system of 1.2-2.3 ppm.

Subsequent dose: Maintain a concentration of 0.2-1.2 ppm **BIO-CLEAR[®] 1000** in the system.

Badly fouled systems must be cleaned before treatment is begun.

FOR CONTROL OF FUNGI AND ALGAE

Add sufficient **BIO-CLEAR[®] 1000** to achieve a concentration in the system of 7.0-23.0 ppm active ingredient, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD: Initial dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR[®] 1000** to achieve a concentration in the system of 11.6-23.0 ppm active ingredient. Maintain until control is achieved.

Subsequent dose: When microbial control is evident, add sufficient **BIO-CLEAR[®] 1000** daily to maintain a concentration in the system of 7.0-23.0 ppm active ingredient, or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD: Initial dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR[®] 1000** to reach a concentration in the system of 11.6-23.0 ppm active ingredient.

Subsequent dose: Maintain a continuous feed of 7.0-23.0 ppm **BIO-CLEAR[®] 1000** in the system.

Badly fouled systems must be cleaned before treatment is begun.

METALWORKING FLUIDS CONTAINING WATER

This product is effective in metalworking fluid concentrates which have been diluted in water at ratios of 1:100-1:4. For controlling (or inhibiting) the growth of bacteria, fungi, and yeast that may deteriorate metalworking fluids containing water, add **BIO-CLEAR[®] 1000** to the fluid in the collection tank. Additions should be made with a metering pump.

INITIAL OR SLUG DOSE: When the system is just noticeably fouled, add 60.6 ppm **BIO-CLEAR[®] 1000** to the metalworking fluids. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, maintain a concentration of 24.4-48.4 ppm **BIO-CLEAR[®] 1000** in the system, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

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AIR WASHER SYSTEMS

Add sufficient **BIO-CLEAR® 1000** to reach a concentration in the system of 0.35-22.1 ppm active ingredient, depending upon the severity of contamination to control slime-forming bacteria and fungi in industrial air-washing systems.

INTERMITTENT OR SLUG METHOD: Initial Dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR® 1000** to reach a concentration in the system of 0.7-22.1 ppm active ingredient. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add sufficient **BIO-CLEAR® 1000** every two days to reach a concentration in the system of 0.35-10.8 ppm active ingredient, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD: Initial Dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR® 1000** to achieve a concentration in the system of 0.7-22.1 ppm active ingredient. Subsequent Dose: Maintain this level by pumping a continuous feed of 0.35-10.9 ppm active ingredient in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

NOTE: For use only in industrial air-washer systems that maintain effective mist eliminating components.

PUBLICLY OWNED TREATMENT WORKS

To control coliform and other bacteria, add sufficient **BIO-CLEAR® 1000** to reach a concentration in the system of 0.2 to 2.0 ppm active ingredient by weight of water being treated, depending on the severity and contamination in the system. Addition should be continuous and should be made with a metering pump at a point in the system where mixing will be rapid and thorough. Add **BIO-CLEAR® 1000** to the system in a location where contact time will be 30 minutes or greater before reaching the outfall.

To Use as a Co-Treatment with Chlorine: Add sufficient **BIO-CLEAR® 1000** to reach a concentration in the system of 0.1 to 0.3 ppm **BIO-CLEAR® 1000** active ingredient by weight of water treated. Chlorination should result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition should be continuous and be made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. **BIO-CLEAR® 1000** should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

REVERSE OSMOSIS SYSTEMS

For controlling bacteria, fungi, and algae slimes in non-potable reverse osmosis systems and peripheral equipment, add **BIO-CLEAR® 1000** to the system inlet water or before any other contamination area ahead of the reverse osmosis unit. **BIO-CLEAR® 1000** should be added with a metering pump on an intermittent basis depending on the severity of contamination and the guidelines specified by the membrane manufacturer for bioclear. Add sufficient **BIO-CLEAR® 1000** to achieve a concentration of 0.2 to 24.0 ppm in the feedwater. During use of **BIO-CLEAR® 1000** both permeate and reject waters should be directed to the drain. Once treatment is completed, rinsing with feedwater should continue until conductivity values in the permeate are at or below values before treatment with **BIO-CLEAR® 1000**. Badly fouled systems must be cleaned before treatment is begun.

For Control of Bacteria: Initial Dose: When the system is noticeably fouled, add sufficient **BIO-CLEAR® 1000** to achieve a concentration of 1.2 – 2.4 ppm active ingredient in the feedwater. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved or as specified by guidelines recommended by the membrane manufacturer. Subsequent Dose: When microbial control is achieved, maintain a concentration of 0.6 – 2.4 ppm of **BIO-CLEAR® 1000** in the feedwater, or as specified by guidelines recommended by the membrane manufacturer.

For Control of Fungi and Algae: Initial Dose: When the system is noticeably fouled, add 12.0-24.0 ppm **BIO-CLEAR® 1000** to the feedwater. Minimum treatment intervals should be 15 minutes. Repeat until control is achieved or as specified by guidelines recommended by the membrane manufacturer. Subsequent dose: When microbial control is achieved, maintain a concentration of 7.2 – 24.0 ppm **BIO-CLEAR® 1000** in the feedwater, or as specified by guidelines recommended by the membrane manufacturer.

HYDROTES (IN)

For Control of Bacteria: Water used in hydrotest pipelines or vessels should contain 100 to 1000 ppm of **BIO-CLEAR® 1000** per 1,000 gallons of water depending on water quality and length of time the equipment will remain idle.

PROCESS, PRODUCT, WASTEWATER & RECYCLE CLEAN UP

BIO-CLEAR® 1000 may be used to reduce microbial contamination in process water and raw materials. **BIO-CLEAR® 1000** may also be used for treatment of wastewater. The required concentration will depend upon the material being treated and the contamination load. You will need to determine the optimum level to use for your system or product within the guidelines given below. Do not use at greater than recommended levels.

Consumer, Household & Institutional Processes & Products: **BIO-CLEAR® 1000** is not intended for use in personal care products or products that will come in direct or indirect contact with food.

Process Water & Raw Material Clean Up

To reduce microbial contamination in process water or raw materials used to make consumer, household, or institutional products, add **BIO-CLEAR® 1000** directly to the water or raw material at concentrations of 5 – 406 ppm by weight.

Direct Product Addition

To reduce microbial contamination in formulated products such as hard surface cleaners, laundry detergent, fabric softeners and other hard surface cleanser, and other water based formulations, add 5 – 406 ppm by weight **BIO-CLEAR® 1000** directly to the product prior to packaging. Thorough mixing is recommended.

Consumer, Household & Institutional Recycle Water, Recycle Product Clean up & Recycle Wastewater: **BIO-CLEAR® 1000** is not intended for use in products that will come in direct or indirect contact with food.

BIO-CLEAR® 1000 may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Add at a convenient point of uniform mixing. This can be either continuous feed directly into a transfer line or slug fed to the storage container for either wash water or product. Add 5 – 406 ppm by weight.

Industrial Processes & Products:

Process Water & Raw Material Clean Up

To reduce microbial contamination in process water or raw material used to make industrial products, add **BIO-CLEAR® 1000** directly to the process water or raw material at a concentration of 5 – 406 ppm by weight. This includes raw materials and/or products such as aqueous paints and coatings, polymers, slurries, adhesives, latex and resin emulsions and surfactant.

Direct Product Addition

To clean up microbial contamination in a final formulated industrial product, add 5 – 406 ppm by weight **BIO-CLEAR® 1000** directly to the product prior to packaging.

Industrial Recycle Water, Recycle Product Clean up & Recycle Wastewater:

BIO-CLEAR® 1000 may be added to recycle process water, a recycle product stream or added to a recycle waste water stream to reduce microbial contamination. Add at a convenient point of uniform mixing. This can be either continuous feed directly into a transfer line or slug fed to the storage container for either wash water or product. Add 5 – 406 ppm by weight.

INDUSTRIAL WASTEWATER SYSTEMS

Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks:

BIO-CLEAR® 1000 may be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 5 – 406 ppm by weight.

Tankside Additions to Electrodeposition Systems:

BIO-CLEAR® 1000 may be added as a tankside additive in recirculating electrodeposition systems and associated rinse systems to control microbial contamination. **BIO-CLEAR® 1000** should be added into the recirculating rinse system at a point to insure uniform mixing. Add 5 – 406 ppm by weight.

EQUIPMENT CLEANING

BIO-CLEAR® 1000 can be used to kill microorganisms present in solution or growing on the surfaces of process equipment such as reaction vessels, storage tanks and containers, piping and hoses. For standard cleaning of equipment, add 50 – 250 ppm by weight of **BIO-CLEAR® 1000** in an aqueous solution, to process piping or equipment. Heavily fouled solutions or equipment may be treated with up to 2000 ppm of **BIO-CLEAR® 1000**. After treating process equipment with **BIO-CLEAR® 1000**, allow the **BIO-CLEAR® 1000** solution to be in contact with surfaces for up to four hours. If bleach is being used for cleaning purposes at 50 to 250 available chlorine, **BIO-CLEAR® 1000** can be used as part of a dual treatment program at 50 to 100 ppm by weight, in combination with sodium hypochlorite. Treat process equipment with chlorine first. Follow the treatment with **BIO-CLEAR® 1000**. Do not combine concentrated sodium hypochlorite solution with **BIO-CLEAR® 1000**.

DOT / TDG / IMDG

Proper Shipping name:
Toxic Solid, Organic, N.O.S.,
(2, 2-Dibromo-3-Nitropropionamide),
Class 6.1, UN2811, PG III

For Emergency Information:
Call TOLL FREE:
1-800-424-9300 (CHEMTREC)

KEEP CONTAINER TIGHTLY CLOSED
WHEN IN USE

DO NOT SHIP WITH FOOD, FEEDS, DRUGS

KEEP CONTAINER TIGHTLY CLOSED WHEN
NOT IN USE

TO MAINTAIN PRODUCT QUALITY, STORE IN
THE DARK AT TEMPERATURES BELOW °C.

For Questions, please contact:
CLEARWATER INTERNATIONAL, LLC
(724) 318-1050

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