

59106-7

07/24/2009
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

1/10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

JUL 24 2009

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

Subject: **BIO-CLEAR 5000**
EPA Registration No. 59106-7
Application Date: March 25, 2009
Receipt Date: March 27, 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. You must delete the word "Recommendations" under the heading User Safety Recommendations and replace with the word "Instructions", per PR Notice 2005.
2. You must delete the word "General" under the heading General Precautions and Restrictions per PR Notice 2005
3. Delete "may be" and replace with "is" under the Reverse Osmosis System section of your label.
4. You must clarify your opening sentence under the Process, Product, Wastewater & Recycle Clean Up section of your label, by removing "may be", 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."
5. Under the Equipment Cleaning section of your label, delete "...such as (reaction vessels, storage tanks and containers, piping and hoses." Also, in the section of your label, delete the word "may" and replace with the word "must" where the sentence begins with "Heavily fouled solutions or equipment..."

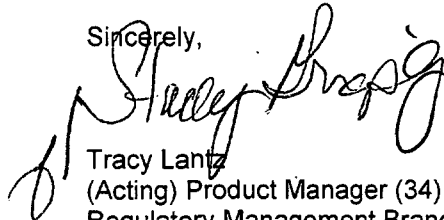
SYMBOL							
SURNAME							
DATE							

2/10

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

CONCURRENCES							
SYMBOL							
SURNAME							
DATE							

3/10

BIO-CLEAR 5000

Controls bacteria, fungi and yeasts in metalworking fluids containing water, and enhanced oil recovery systems; controls bacteria, fungi, and algae in industrial recirculating water cooling towers and reverse osmosis systems; controls slime-forming bacteria and fungi in air-washer systems; controls coliform and bacteria in publicly-owned treatment works

Reduces microbial contamination in process water, raw materials and formulated industrial products. Reduces microbial contamination in process water, raw materials and formulated consumer and institutional products that will not come in direct or indirect contact with food. Reduces microbial contamination in wastewater, recycled process water, recycled products, recycled wastewater and equipment cleaning operations.

FOR INDUSTRIAL USE ONLY

Active Ingredients:
2-2-Dibromo-3-nitrilopropionamide 5%
Other Ingredients..... 95%
Total:100%

KEEP OUT OF REACH OF CHILDREN

DANGER

Manufactured [by][for]:
Clearwater International, LLC
515 Post Oak Blvd., Ste. 200
Houston, TX 77027

EPA Reg. No.: 59106-7
EPA Est. No.:
NET WEIGHT: _____ POUND (S)

ACCEPTED
with COMMENTS
EPA Letter Dated:

JUL 24 2009

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 59106-7

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if swallowed or absorbed through skin. Harmful if inhaled. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear goggles, face shield or safety glasses. 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.

FIRST AID

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 30 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 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.

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.

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 1-800-858-7378, 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. Apply this product only as specified on this label. Do not contaminate water by cleaning of equipment, or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water 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 AND CHEMICAL HAZARDS

Incompatible with potassium permanganate and powdered iron.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear

- coveralls over, long-sleeved shirt and long pants

- socks and chemical resistant footwear

- goggles or face shields

- chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, Neoprene rubber, polyvinyl chloride or Viton)

- For mixing/loading: wear a chemical resistant apron.

Follow manufacturers' instructions for cleaning and maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry

USER SAFETY RECOMMENDATIONS

Users must wash hands before eating, drinking, chewing gum or using the toilet. Users must remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users must remove PPE immediately after handling this product. Wash the outside of the gloves before removing. As soon as possible wash thoroughly.

GENERAL PRECAUTIONS AND RESTRICTIONS

Do not apply this product directly in a way that will contact workers or other persons.

DIRECTIONS FOR USE

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

NOTE: Add **BIO-CLEAR 5000** separately to the system. Do not mix it with other additives, in order to avoid decomposition of **BIO-CLEAR 5000** due to the high pH of many additive formulations.

METALWORKING FLUIDS CONTAINING WATER

This product is effective in metalworking fluid concentrates which have been diluted in water at ratios 1:100-1:4.

For controlling (or inhibiting) the growth of bacteria, fungi, and yeasts that may deteriorate metalworking fluids containing water, add **BIO-CLEAR 5000** 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 1.1 gal of **BIO-CLEAR 5000** per 1,000 gal of metalworking fluid to the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident, add 0.44-0.88 gal of **BIO-CLEAR 5000** per 1,000 gal of metal working fluid per day, or as needed to maintain control. Additions can be made continuously or intermittently. Slug the system as required.

ENHANCED OIL RECOVERY SYSTEM

For controlling slime-forming bacteria, sulfide-producing bacteria, yeasts and fungi in oil field water, polymer or micellar floods, water-disposal systems, or other oil field water systems add 4-320 ppm **BIO-CLEAR 5000** (0.4-28.6 gal of **BIO-CLEAR 5000** per 2400 barrels of water) depending on the severity of contamination. Additions should be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD

When the system is noticeably fouled, add 40-320 ppm **BIO-CLEAR 5000** (3.6-28.6 gal of **BIO-CLEAR 5000** per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 4-

60 ppm **BIO-CLEAR 5000** (0.4-5.4 gal of **BIO-CLEAR 5000** per 2400 barrels of water) continuously or as needed to maintain control.

INTERMITTENT OR SLUG METHOD

When the system is noticeably fouled, or to maintain control of the system, add 40-320 ppm **BIO-CLEAR 5000** (3.6-28.6 gal of **BIO-CLEAR 5000** per 2400 barrels 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 5000** 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 60-320 ppm **BIO-CLEAR 5000** (5.4-28.6 gal of **BIO-CLEAR 5000** per 2400 barrels of water). Additions of **BIO-CLEAR 5000** should be made with a metering pump immediately after preparation of the aqueous biopolymer solution to prevent loss of viscosity.

INDUSTRIAL RECIRCULATING WATER COOLING TOWERS

Add **BIO-CLEAR 5000** to the basin (or any other point of uniform mixing). Additions should be made with a metering pump; it may be continuous or intermittent, depending on the severity of the contamination when the treatment has begun, and the retention time of 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.

Badly fouled systems must be cleaned before treatment has begun.

FOR CONTROL OF BACTERIA

Add 0.0038-0.038 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system, depending on the severity of contamination.

INTERMITTENT OR SLUG METHOD:

INITIAL DOSE: When the system is noticeably fouled, add 0.019-0.038 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.0095-0.038 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system every 4 days, or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add 0.019-0.038 gal of **BIO-CLEAR 5000** per 1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0038-0.019 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system per day.

FOR CONTROL OF FUNGI AND ALGAE

Add 0.116-0.360 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system depending on the severity of contamination.

INTERMITTENT OF SLUG METHOD:

INITIAL DOSE: When the system is noticeably fouled, add 0.192-0.380 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.116-0.380 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system, or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add 0.192-0.380 gal of **BIO-CLEAR 5000** per 1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.116-0.380 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system per day.

AIR-WASHING SYSTEMS

Add 0.0078-0.250 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system, depending upon the severity of contamination to control slime-forming bacteria and fungi in industrial air-washer systems.

Badly fouled systems must be cleaned before treatment has begun.

INTERMITTENT OR SLUG METHOD:

INITIAL DOSE: When the system is noticeably fouled, add 0.156-0.250 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.00785-0.125 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system every 2 days, or as needed to maintain control.

CONTINUOUS FEED METHOD

INITIAL DOSE: When the system is noticeably fouled, add 0.156-0.250 gal of **BIO-CLEAR 5000** per 1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0078-0.125 gal of **BIO-CLEAR 5000** per 1,000 gal of water in the system per day.

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

REVERSE OSMOSIS SYSTEMS

BIO-CLEAR 5000 may be used to control bacteria and reduce biofouling in industrial membrane systems (reverse osmosis, ultrafiltration, microfiltration). Acceptable applications include reverse osmosis for the production of boiler makeup water, rinsing of electric components, and industrial wastewater treatment.

BIO-CLEAR 5000 may be fed continuously to the membrane system feed water at a rate of 10-100 ppm **BIO-CLEAR 5000** (5.2-52.0 fl. oz./1,000 gallons or 1.6 to 16 ml/min per 10 gpm of feed water). For off-line system disinfection, add 50-170 ppm **BIO-CLEAR 5000** (26-88.0 fl. oz/ 1,000 gallons) to the off-line cleaning feed tank and re-circulate for 30 minutes to 3 hours. Frequency of addition should be every 5 days or as needed.

Note: For industrial systems in which **BIO-CLEAR 5000** residuals cannot be tolerated, **BIO-CLEAR 5000** must be slug fed. During and for 30 minutes to 1 hour following chemical addition, permeate and concentrate streams must be diverted to waste.

HYDROTESTING

FOR CONTROL OF BACTERIA

Water used to hydrotest pipelines or vessels should contain 100 to 1,000 ppm of **BIO-CLEAR 5000** per 1,000 gallons of water (0.4 to 4 gallon of **BIO-CLEAR 5000** per 1000 gallons of water) depending on water quality and length of time the equipment will remain idle.

PUBLICLY-OWNED TREATMENT WORKS

TO CONTROL COLIFORM AND BACTERIA

Add **BIO-CLEAR 5000** at a concentration of 1.0 to 10.0 ppm by weight of water being treated, depending on the severity and contamination in the system.

Addition should be continuous and made with a metering pump at a point in the system where mixing will be rapid and thorough. Add **BIO-CLEAR 5000** 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 0.4-1.5 ppm **BIO-CLEAR 5000** 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 made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. **BIO-CLEAR 5000** should be added at a location where a contact time of 10 minutes or longer will be provided before reaching the outfall.

PROCESS, PRODUCT, WASTEWATER & RECYCLE CLEAN UP

BIO-CLEAR 5000 may be used to reduce microbial contamination in process water and raw materials during the formulating phase or it can be added directly to the final formulation product to reduce microbial contamination prior to packaging. **BIO-CLEAR 5000** may also be used for treatment of wastewater. The required concentration will depend upon the material being treated and the contamination load. Organic load, pH exposure to load and time are matrix effects that impact efficacy of the biocide. 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 5000 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 5000** directly to the water or raw material at concentration of 125-1,000 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, laundry detergent, fabric softeners and other water based formulations, add 125-250 ppm by weight **BIO-CLEAR 5000** directly to the product prior to packaging. Thorough mixing is recommended.

CONSUMER, HOUSEHOLD & INSTITUTIONAL RECYCLE WATER, RECYCLE PRODUCT CLEANUP & RECYCLE WASTEWATER

BIO-CLEAR 5000 is not intended for use in products that will come in direct or indirect contact with food.

BIO-CLEAR 5000 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 125 to 1,000 ppm by weight. This concentration is equivalent to 152 to 1,212 ml (5.12 to 40.8 fluid oz) **BIO-CLEAR 5000** per 100 gallons to be treated.

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 5000** directly to the process water or raw material at a concentration of 125-2,000 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 125-500 ppm by weight **BIO-CLEAR 5000** directly to the product prior to packaging.

INDUSTRIAL RECYCLE WATER, RECYCLE PRODUCT CLEAN UP & RECYCLE WASTEWATER

BIO-CLEAR 5000 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 125 to 2000 ppm by weight. This concentration is equivalent to 152 to 2,424 ml (5 to 81.6 fluid oz) **BIO-CLEAR 5000** per 100 gallons to be treated.

INDUSTRIAL WASTEWATER SYSTEMS

WASTEWATER SYSTEMS, WASTEWATER SLUDGE AND WASTEWATER HOLDING TANKS

BIO-CLEAR 5000 may be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 125-2,000 ppm by weight. This concentration is equivalent to 1,512-24,216 milliliters **BIO-CLEAR 5000** (51.2-818.8 fl. oz.) per 1,000 gallons of water.

TANKSIDE ADDITION TO ELECTRODEPOSITION SYSTEMS

BIO-CLEAR 5000 may be added as a tankside additive in recirculating electrodeposition systems and associated rinse systems to control microbial contamination. **BIO-CLEAR 5000** should be added into the recirculating rinse system at a point to insure uniform mixing. Add 125 to 2000 ppm by weight. This concentration is equivalent to 1,512-24,216 milliliters of **BIO-CLEAR 5000** (51.2-818.8 fl oz.) per 1000 gallons of water.

EQUIPMENT CLEANING

BIO-CLEAR 5000 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 to 250 ppm by weight of **BIO-CLEAR 5000** 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 5000** after treating process equipment with **BIO-CLEAR 5000**, allow the **BIO-CLEAR 5000** 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 5000** 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 5000**. Do not combine concentrated sodium hypochlorite solution with **BIO-CLEAR 5000**.

10/10

PESTICIDE STORAGE AND DISPOSAL

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

Pesticide Storage: To maintain product quality, store at temperatures below 60°C. Keep container tightly closed when not in use.

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 instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Spills: When handling or dealing with spills, wear protective clothing as indicated in the Personal Protective Equipment section. Cover wet spills with 10% sodium bicarbonate solution, water and then an inert absorbent before sweeping up and disposing as described for pesticide disposal. If drum contents are contaminated or decomposing, isolate unsealed drum in the open or in a well-ventilated area. Flood with 10% sodium bicarbonate solution and large volume of water, if necessary.

[Batch Code]