59106-6 5/30/2013 1/3

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

MAY 30 2013

Dee Wilson, Regulatory Affairs
Weatherford Engineered Chemistry
100 Leetsdale Industrial Drive, Suite A
Leetsdale, PA 15056

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Subject: BIO CLEAR® 2000
EPA Registration Number: 59106-6
Application Date: February 11, 2013
Receipt Date: March 04, 2013

Dear Ms. Wilson:

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

Proposed Amendment

Deleting the following uses from the label:

- Once-through cooling water applications
- Metal working fluids "high" exposure applications
- Paints and coatings
- Household/institutional cleaners/detergents

General Comments

A stamped label is enclosed for your records. Submit 3 copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

If you have further questions concerning this letter, then please contact me by telephone at (703) 308-6416 or by e-mail at campbell.jacqueline@epa.gov or Lorena Rivas by telephone at (703) 305-5027 or by email at rivas.lorena@epa.gov . When you are submitting information or data in response to this letter, send a copy of this letter to accompany the submission in order to facilitate processing.

Sincerely,

Jacqueline Campbell
Product Manager (34)
Regulatory Management Branch II
Antimicrobials Division (7510P)

Enclosure: stamped label

Weatherford®

BIO CLEAR® 2000

Controls coliform and bacteria in publicly-owned treatment works; controls bacteria, fungi and yeasts in 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. Reduces microbial contamination in non-food contact process water, non-food contact raw materials and formulated and industrial products that will not come in direct or indirect contact with food. Reduces microbial contamination in process water and raw materials. 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	20%
Other Ingredients	80%
Total:	100%

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Danger. Corrisive. Causes irreversible eye damage or skin burns. Do not get on eyes or on clothing. May cause loss of vision. Fatal if absorbed through skin. Harmful if swallowed or inhaled. Avoid breathing vapor. This product may cause skin sensitization reactions in some people. Wear face goggles or face shield (safety glasses). Wear protective clothing (long sleeve shirt and long pants, socks plus shoes and chemical resistant gloves such as waterproof gloves). Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

ACCEPTED
MAY 30 2013
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. EPA Reg. No.: 59106-6

Manufactured by:
Clearwater International, LLC
Weatherford Engineered Chemistry
2000 St James Place
Houston, TX 77056

EPA Est. No.: 059106-PA-001

NET WEIGHT:_____POUNDS

Batch code:

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, 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 REQUIREMENTS

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.

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 five 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.

GENERAL PRECATIONS 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 2000** separately to the system. Do not mix it with other additives, in order to avoid decomposition of **BIO-CLEAR 2000** due to the high pH of many additive formulations.

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 1-80 ppm **BIO-CLEAR 2000** (0.1-6.4 gal of **BIO-CLEAR 2000** per 2400 barrels of water) depending on the severity of contamination. Additions must be made with a metering pump either continuously or intermittently.

CONTINUOUS FEED METHOD: When the system is noticeably fouled, add 10-80 ppm **BIO-CLEAR 2000** (0.8-6.4 gal of **BIO-CLEAR 2000** per 2400 barrels of water) continuously until the desired degree of control is achieved. Subsequently, treat with 1-15 ppm **BIO-CLEAR 2000** (0.1-1.2 gal of **BIO-CLEAR 2000** 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 1-80 ppm **BIO-CLEAR 2000** (0.8-6.4 gal of **BIO-CLEAR 2000** 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 the contamination. Addition of **BIO-CLEAR 2000** can 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 BIPOLYMER USED IN FLOODING OPERATIONS, add 15-80 ppm **BIO-CLEAR 2000** (1.2-6.4 gal of **BIO-CLEAR 2000** per 2400 barrels of water). Additions of **BIO-CLEAR 2000** must 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 2000** to the basin (or any other point of uniform mixing). Additions must be made with a metering pump; it can 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 must be discontinued for 24-48 hours.

Badly fouled systems must be cleaned before treatment has begun.

FOR CONTROL OF BACTERIA

Add 0.00095-0.0095 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system, depending on the severity of the contamination.

INTERMITTENT OR SLUG METHOD:

INITIAL DOSE: When the system is noticeably fouled, add 0.0048-0.0095 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.0024-0.0095 gal of **BIO-CLEAR 2000** 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 noticeable fouled, add 0.0048-0.0095 gal of **BIO-CLEAR 2000** per 1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.00095-0.0048 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system per day.

FOR CONTROL OF FUNGI AND ALGAE

Add 0.029-0.095 gal of **BIO-CLEAR 2000** 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 0.048-0.095 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.029-0.095 gal of **BIO-CLEAR 2000** 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 0.048-0.095 gal of **BIO-CLEAR 2000** per 1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.029-0.095 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system per day.

REVERSE OSMOSIS SYSTEMS

BIO-CLEAR 2000 can 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 2000** must be fed continuously to the membrane system feed water at a rate of 10-100 ppm **BIO-CLEAR 2000** (1.3-13.0 fl. Oz./1,000 gallons or 0.4 to 4.0 ml/min per 10 ppm of feed water). For off-line system disinfection, add 50-170 ppm **BIO-CLEAR 2000** (6.5-22.0 fl. Oz./1,000 gallons) to the off-line cleaning feed tank and re-circulate for 30 minutes to 3 hours. Frequency of addition must be every 5 days or as needed. **Note:** for industrial systems in which **BIO-CLEAR 2000** residuals cannot be tolerated, **BIO-CLEAR 2000** must be slug fed. During and for 30 minutes to 1 hour following chemical addition, permeate and concentrate streams must be diverted to waste.

AIR-WASHING SYSTEMS

Add 0.0015-0.095 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system, depending on 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 0.003-0.095 gal of **BIO-CLEAR 2000** per 1,000 gal of water in the system. Repeat until control is achieved.

SUBSEQUENT DOSE: When microbial control is evident add 0.00015-0.047 gal of **BIO-CLEAR 2000** 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 0.003-0.095 gal of **BIO-CLEAR 2000** per 1,000 gal of water to the system.

SUBSEQUENT DOSE: Maintain this level by pumping a continuous feed of 0.0015-0.047 gal of **BIO-CLEAR 2000** 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.

HYDROTESTING

FOR CONTROL OF BACTERIA

Water used to hydrotest pipelines or vessels must contain 100-1,000 ppm of **BIO-CLEAR 2000** per 1,000 gallons of water (0.1 to 1 gallon of **BIO-CLEAR 2000** per 1,000 gallons of water) depending on water quality and length of time the equipment will remain idle.

PUBLICLY-OWNED TREATMENT WORKS

TO CONTROL COLIFORM OR BACTERIA

Add **BIO-CLEAR 2000** 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 must be continuous and made with a metering pump at a point in the system where mixing will be rapid and thorough. Add **BIO-CLEAR 2000** 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 2000** by weight of water treated.

Chlorination must result in a minimum detectable residual (i.e., greater than zero but less than the NPDES permit level). Addition must be continuous and made at a point just after initial chlorine mixing. Rapid mixing is necessary for maximum effectiveness. **BIO-CLEAR 2000** must 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 CLEANUP

BIO-CLEAR 2000 *can 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 2000** can 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 le...

RECYCLE PRODUCT CLEANUP & RECYCLE WASTEWATER

BIO-CLEAR 2000 is not intended for use in products that will come in direct or indirect contact with food.

BIO-CLEAR 2000 can be added to recycle process water, a recycle product stream or added to a recycle wastewater 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 38 to 303 ml (1.28 to 10.2 fluid oz.) **BIO-CLEAR 2000** per 100 gallons to be treated.

NON-FOOD CONTACT INDUSTRIAL PROCESSES & NON-FOOD CONTACT PRODUCTS

Process Water and Raw Material Clean Up

To reduce microbial contamination in process water or raw material used to make industrial products, add **BIO-CLEAR 2000** directly to the process water or raw material at a concentration of 125 to 2,000 ppm by weight. This includes raw materials and/or products such as polymers, slurries, adhesives, latex and resin emulsions and surfactant.

Direct Product Addition

To clean up microbial contamination i a final formulated industrial product, add 125-500 ppm by weight **BIO-CLEAR 2000** directly to the product prior to packaging.

INDUSTRIAL RECYCLE WATER, RECYCLE PRODUCT CLEAN UP & RECYCLE WASTEWATER

BIO-CLEAR 2000 can be added to recycle process water, a recycle product stream or added to a recycle wastewater 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 2,000 ppm by weight. This concentration is equivalent to 38 to 606 ml (1.25 to 20.4 fluid oz.) **BIO-CLEAR 2000** per 100 gallons to be treated.

INDUSTRIAL WASTEWATER SYSTEMS

WASTEWATER SYSTEMS, WASTEWATER SLUDGE AND WASTEWATER HOLDING TANKS

BIO-CLEAR 2000 must 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 378-6054 milliliters **BIO-CLEAR 2000** (12.8-204.7 fl. oz.) per 1,000 gallons of water.

TANKSIDE ADDITION TO ELECTRODEPOSITIONSYSTEMS

BIO-CLEAR 2000 can be added as a tankside additive in recirculating electrodeposition systems and associated rinse systems to control microbial contamination. **BIO-CLEAR 2000** must be added into the recirculating rinse system at a point to insure uniform mixing. Add 125 to 2,000 ppm by weight. This concentration is equivalent to 378-6054 milliliters of **BIO-CLEAR 2000** (12.8-204.7 fl. oz.) *per 1,000 gallons of water.*

EQUIPMENT CLEANING

BIO-CLEAR 2000 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 2000** in an aqueous solution, to process piping or equipment. Heavily fouled solutions or equipment must be treated with up to 2,000 ppm of **BIO-CLEAR 2000**. After treating process equipment with **BIO-CLEAR 2000**, allow the **BIO-CLEAR 2000** 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 2000** 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 2000**. Do not combine concentrated sodium hypochlorite solution with **BIO-CLEAR 2000**.

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 Handling:

For Non-Refillable Rigid Containers of all Sizes:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (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.

For Refillable Rigid Tote 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 container before final disposal, empty contents into application equipment and triple rinse. Pour or pump rinsate into application equipment or rinsate collection system. Then offer for recycling if available, 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.

NOTICE: Do not ship or store with food, feeds, drugs or clothing.

Corrosive Liquid, Acidic, Organic, N.O.S. (2,2-dibromo-3-nitrilopropionamide) 8, UN3265, PG III