# 05/07/2004 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

May 7, 2004

William C. McCormick The Clorox Company c/o PS&RC P.O. Box 493 Pleasanton, CA 94566-0803

Subject: Generic Bleach 12.5% EPA Registration No. 5813-20001 Application Date: February 10, 2004 Receipt Date: February 12, 2004

Dear Mr. McCormick:

This submission is based on revisions requested in an Agency letter to The Clorox Company. dated January 16, 2004.

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

# General Comments

A stamped copy of the accepted labeling is enclosed. Submit a copy of your final . printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact Wanda Mitchell at (703) 308-6345.

Sincerely,

Emily H. Mitchell Product Manager - Team 32 Regulatory Management Branch II Antimicrobials Division (7510C)

CONCURRENCES								
SYMBOL	75							
RIRNAME	Mittie	i datal di						
DATE	5/7	Ard at						

EPA Form 1320-1A (1/00)

Printed on Recycled Paper

OFFICIAL FILE COPY

Note: Bold, italicized text is information for the reader and is not part of the label. [Bracketed information is optional text.] Text separated by a diamond bullet (
) denotes -and/or- options. <u>Underlined text is new</u>. Strike-through (text) means removed.

EPA Reg. No. 05813-20001 Generic Bleach 12.5% Page 1 of 7

SENERIC BLEACH 12.5%

KEEP OUT OF REACH OF CHILDREN **DANGER** 

# CLOROX

# 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.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

**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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For further information, call 1-888-797-7225.

# ACCEPTED with COMMENTS EPA Letter Dated:

(See additional precautions on back panel.)

MAY -7 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act as

registered under EPA Reg. No. 5813-20001

NET CONTENTS

Note: Bold, italicized text is information for the reader and is not part of the label. [Bracketed information is optional text.] Text separated by a dram information (interference) and/or- options. <u>Underlined text is new</u>. Str.ke-through (inst) means removed.

EPA Reg. No. 05813-20001. Genetic Bleach 12.5%. Page 2 of 7

# **DIRECTIONS FOR USE**

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

NOTE: This product degrades with age. Us a chlorine test kit and increase dosage, as necessary, to obtain the required level of available chlorine.

#### **SEWAGE & WASTEWATER EFFLUENT TREATMENT**

The disinfection of sewage effluent must be evaluated by determining the total number of coliform bacteria and/or fecal coliform bacteria, as determined by the Most Probable Number (MPN) procedure, of the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

On the average, satisfactory disinfection of secondary wastewater effluent can be obtained when the chlorine residual is 0.5 ppm after 15 minutes contact. Although the chlorine residual is the critical factor in disinfection, the importance of correlating chlorine residual with bacterial kill must be emphasized. The MPN of the effluent, which is directly related to the water quality standards requirements, should be the final and primary standard and the chlorine residual should be considered an operating standard valid only to the extent verified by the coliform quality of the effluent

The following are critical factors affecting wastewater disinfection.

1. Mixing: It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.

2. Contacting: Upon flash mixing, the flow through the system must be maintained.

3. Dosage/Residual Control: Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

#### SEWAGE & WASTEWATER TREATMENT

EFFLUENT SLIME CONTROL - Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Prepare this solution by mixing 10 to 100 oz of this product with 100 gallons of water. Once control is evident, apply a 15 ppm available chlorine solution. Prepare this solution by mixing 3 oz of this product with 100 gallons of water.

FILTER BEDS - SLIME CONTROL: Remove filter from service, drain to a depth of 1 ft above filter sand, and add 80 oz of product per 20 sq/ft evenly over the surface. Wait 30 minutes before draining water to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing filter.

R0154030 F master 2/6/04 7:16 AM Page 3

4/8

EPA Reg. No. 05813-20007. Generic Bleach 12.535. Page 3 of 7

#### DISINFECTION OF DRINKING WATER (Emergency/Public/Individual Systems)

#### PUBLIC SYSTEMS

Mix a ratio of 1 oz of this product to 100 gallons of water. Begin feeding this solution with a hypochlorinator until a free available chlorine residual of at least 0.2 ppm and no more than 0.6 ppm is attained throughout the distribution system. Check water frequently with a chlorine test kit. Bacteriological sampling must be conducted at a frequency no less than that prescribed by the National Interim Primary Drinking Water Regulations. Contact your local Health Department for further details.

#### INDIVIDUAL SYSTEMS

1. DUG WELLS: Upon completion of the casing (lining), wash the interior of the casing (lining) with a 100 ppm available chlorine solution using a stiff brush. After covering the well, pour the sanitizing solution into the well through both the pipesleeve opening and the pipeline. Wash the exterior of the pump cylinder also with the sanitizing solution. Start pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Consult your local Health Department for further details.

#### **INDIVIDUAL WATER SYSTEMS**

1. DRILLED, DRIVEN AND BORED WELLS: Run pump until water is as free from turbidity as possible. Pour a 100 ppm available chlorine sanitizing solution into the well. Add 5 to 10 gallons of clean, chlorinated water to the well in order to force the sanitizer into the rock formation. Wash the exterior of pump cylinder with the sanitizer. Drop pipeline into well, start pump and pump water until strong odor of chlorine in water is noted. Stop pump and wait at least 24 hours. After 24 hours flush well until all traces of chlorine have been removed from the water. Deep wells with high water levels may necessitate the use of special methods for introduction of the sanitizer into the well. Consult your local Health Department for further details.

2. FLOWING ARTESIAN WELLS: Artesian wells generally do not require disinfection. If analysis indicate persistent contamination, the well should be disinfected. Consult your local Health Department for further details.

#### **EMERGENCY DISINFECTION**

When boiling of water for 1 minute is not practical, water can be made potable by using this product. **Prior** to addition of the sanitizer, remove all suspended material by filtration or by allowing it to settle to the bottom. Decant the **clarified**, contaminated water to a clean container and add 1 teaspoon of this product to 25 gallons of water. Allow the treated water to stand for 30 minutes. Properly treated water **should** have a slight chlorine odor. If not, repeat dosage and allow the water to stand an additional 15 minutes. The treated water can then be made palatable by pouring it between clean containers for several times.

R0154030 F master 2/6/04 7:16 AM Page 4

Note: Bold, italicized text is information for the reader and is not part of the label. [Bracketed information is optional text.] Text separated by a diamond bullet (\*) denotes -and/or- options. <u>Underlined text is new.</u> Strike-through (text) means removed.

EPA Reg. No. 05813-20001 Generic Bleach 12.5% Page 4 of 7

#### PUBLIC WATER SYSTEMS

RESERVOIRS - ALGAE CONTROL: Hypochlorinate streams feeding the reservoir. Suitable feeding points should be selected on each stream at least 50 yards upstream from the points of entry into the reservoir.

MAINS - Thoroughly flush section to be sanitized by discharging from hydrants. Permit a water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual test of 50 ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

NEW TANKS, BASINS, ETC. - Remove all physical soil from surfaces. Place 20 oz of this product for each 5 cubic feet of working capacity (500 ppm available chlorine). Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and return to surfaceservice.

NEW FILTER SAND - Apply 80 oz of this product for each 150 to 200 cubic feet of sand. The action of the product dissolving as the water passes through the bed will aid in sanitizing the new sand.

NEW WELLS - Flush the casing with a 50 ppm available chlorine solution of water containing 5 oz of this product for each 100 gallons of water. The solution should be pumped or fed by gravity into the well after thorough mixing with agitation. The well should stand for several hours or overnight under chlorination. It may then be pumped until a representative raw water sample is obtained. Bacterial examination of the water will indicate whether further treatment is necessary.

EXISTING EQUIPMENT: Remove equipment from service, thoroughly clean surfaces of all physical soil. Sanitize by placing 21 oz of this product for each 5 cubic feet capacity (approximately 500 ppm available chlorine). Fill to working capacity and let stand at least 4 hours. Drain and place in service. If the previous treatment is not practical, surfaces may be sprayed with a solution containing 5 oz of this product for each 5 gallons of water (approximately 1000 ppm available chlorine). After drying, flush with water and return to service.

#### EMERGENCY DISINFECTION AFTER FLOODS

#### WELLS

Thoroughly flush contaminated casing with a 500 ppm available chlorine solution. <u>Prepare this solution by mixing</u> 5 oz of this product with 10 gallons of water. Backwash the well to increase yield and reduce turbidity, adding sufficient chlorinating solution to the backwash to produce a 10 ppm available chlorine residual, as determined by a chlorine test kit. After the turbidity has been reduced and the casing has been treated, add sufficient chlorinating solution to produce a 50 ppm available chlorine residual. Agitate the well water for several hours and take a representative water sample. Retreat well if water samples are biologically unacceptable.

R0154-3

Inter: Bold, italicized text is information for the reader and is not part of the labet. [Bracketed information is optional text.] Text separated by a demond builtet (\*) denotes -and/or- options. <u>Underlined text is new</u>. Strike-through (Iew) means removed. EPA Reg. No. 05813-20001 Genetic Bleach 12.5% Page 5 of 7

RESERVOIRS - In case of contamination by overflowing streams, establish hypochlorinating stations upstream of the reservoir. Chlorinate the inlet water until the entire reservoir obtains a 0.2 ppm available chlorine residual, as determined by a suitable chlorine test kit. In case of contamination from surface drainage, apply sufficient product directly to the reservoir to obtain a 0.2 ppm available chlorine residual in all parts of the reservoir.

BASINS, TANKS, FLUMES, ETC. - Thoroughly clean all equipment, then apply 20 oz of product per 5 cubic feet of water to obtain 500 ppm available chlorine, as determined by a suitable test kit. After 24 hours drain, flush, and return to service. If the previous method is not suitable, spray or flush the equipment with a solution containing 5 oz of this product for each 5 gallons of water (1000 ppm available chlorine). Allow to stand for 2 to 4 hours, flush and return to service.

FILTERS - When the sand filter needs replacement, apply 80 oz of this product for each 150 to 200 cubic feet of sand. When the filter is severely contaminated, additional product should be distributed over the surface at the rate of 80 oz per 20 sq. ft. Water should stand at a depth of 1 foot above the surface of the filter bed for 4 to 24 hours. When filter beds can be backwashed of mud and silt, apply 80 oz of this product per each 50 sq. ft., allowing the water to stand at a depth of 1 foot above the filter sand. After 30 minutes, drain water to the level of the filter. After 4 to 6 hours drain, and proceed with normal backwashing.

DISTRIBUTION SYSTEM - Flush repaired or replaced section with water. Establish a hypochlorinating station and apply sufficient product until a consistent available chlorine residual of a least 10 ppm remains after a 24 hour retention time. Use a chlorine test kit.

#### **EMERGENCY DISINFECTION AFTER FIRES**

#### CROSS CONNECTIONS OR EMERGENCY CONNECTIONS

Hypochlorination or gravity feed equipment should be set up near the intake of the untreated water supply. Apply sufficient product to give a chlorine residual of a least 0.1 to 0.2 ppm at the point where the untreated supply enters the regular distribution system. Use a chlorine test kit.

#### **EMERGENCY DISINFECTION AFTER DROUGHTS**

#### A. SUPPLEMENTARY WATER SUPPLIES

Gravity or mechanical hypochlorite feeders should be set up on a supplementary line to dose the water to a minimum chlorine residual of 0.2 ppm after a 20 minute contact time. Use a chlorine test kit.

B. WATER SHIPPED IN BY TANKS, TANK CARS, TRUCKS, ETC.

Thoroughly clean all containers and equipment. Spray a 50 ppm available chlorine solution and rinse with potable water after 5 minutes. This solution is made by mixing 5 oz of this product for each 10 gallons of water. During the filling of the containers, dose with sufficient amounts of this product to provide at least a 0.22 ppm chlorine residual. Use a chlorine test kit.

R0154-3

R0154030 F master 2/6/04 7:16 AM Page 6

Note: Bold, italicized text is information for the reader and is not part of the label. [Bracketed information is optional text.] Text separated by a diamond builet (♦) denotes -and/or- options. <u>Underlined text is new</u>. Strike-through (<del>laxt</del>) means removed.

EPA Reg. No. 05813-20001 Generic Bleach 12.5% Page 6 of 7

#### EMERGENCY DISINFECTION AFTER MAIN BREAKS

#### MAINS

£

Before assembly of the repaired section, flush out mud and soil. Permit water flow of at least 2.5 feet per minute to continue under pressure while injecting this product by means of a hypochlorinator. Stop water flow when a chlorine residual test of 50 ppm is obtained at the low pressure end of the new main section after a 24 hour retention time. When chlorination is completed, the system must be flushed free of all heavily chlorinated water.

#### **COOLING TOWER/EVAPORATIVE CONDENSER WATER**

SLUG FEED METHOD - Initial Dose: When system is noticeably fouled, apply 52 to 104 oz of this product per 10,000 gallons of water in the system to obtain from 5 to 10 ppm available chlorine. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 11 oz of this product per 10,000 gallons of water in the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled system must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD - Initial Dose: When system is noticeably fouled, apply 52 to 104 oz of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown.

Subsequent Dose: When microbial control is evident, add 11 oz of this product per 10,000 gallons of water in the system to obtain a 1 ppm residual. Apply half (or 1/3, 1/4, or 1/5) of this initial dose when half (or 1/3, 1/4, or 1/5) of the water in the system has been lost by blowdown. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD - Initial Dose: When system is noticeably fouled, apply 52 to 104 oz of this product per 10,000 gallons of water in the system to obtain 5 to 10 ppm available chlorine.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 1 oz of this product per 1,000 gallons of water lost by blowdown to maintain a 1 ppm residual. Badly fouled systems must be cleaned before treatment is begun.

EPA Reg. No. 05813-20001 Generic Bleach 12.5% Page 7 of 7

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# DANGER

Corrosive; may cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear safety glasses or goggles and rubber gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until strong odors have dissipated.

#### **ENVIRONMENTAL HAZARDS**

at Diag

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public 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 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 only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) will release chlorine gas which is irritating to eyes, lungs and mucous membranes.

#### STORAGE AND DISPOSAL

**STORAGE:** Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. **DISPOSAL:** In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer. Do not reuse empty container but place in trash collection. Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment.

This product contains no phosphates -or- phosphorus. "Clorox" is a registered trademark of The Clorox Company.

EPA Reg. No. 5813-20001 EPA Est. No. 5813-CA-03 Mfd. for & © 1997 The Clorox Company Oakland, CA 94612 Made in U.S.A. Printed in U.S.A.