

1258-1233

6/25/2012

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

June 25 2012

Joanna Holcombe
Senior Commercial Regulatory Services Associate
Arch Chemicals Inc
5660 New Northside Dr NW Suite 1100
Atlanta GA 30328

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Subject HTH 300 Grams Tablets
EPA Reg# 1258 1233
Notification Date June 4 2012
Receipt Date June 5 2012

Dear Ms Holcombe

This acknowledges the receipt of your notification submitted under the provision of PR Notice 98 10 and FIFRA section 3(c)9

Proposed Notification

Add optional Spanish signal word PELLIGRO next to DANGER and optional Spanish statement directly above the DIRECTIONS FOR USES [Si usted no entiende la etiqueta busque a alguien para que se la explique a usted en detalle] *{If you do not understand the label find someone to explain it to you in detail }*

Optional placement of First Aid and Statement of Practical Treatment other than on the front panel of the label with See [Left][Right] where they are found for HTH 300 Gram Tablets product (EPA Reg#1258 1233)

General Comment

Based on the review of the material submitted the notification application for these minor additions is acceptable


This notification and this letter have been inserted in your file for future reference

If you have further question on this letter please contact David Liem at liem.david@epa.gov or 703 305 1284

Sincerely

A handwritten signature in black ink, appearing to read "Monisha Harris".

Monisha Harris
Product Manager (32)
Regulatory Management Branch II
Antimicrobials Division (7510P)

 <p style="text-align:center">United States Environmental Protection Agency Washington DC 20460</p>	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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Application for Pesticide Section I

1 Company/Product Number 1258 1233	2 EPA Product Manager Monisha Harris	3 Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4 Company/Product (Name) HTH 300 Gram Tablets	PM# 32	
5 Name and Address of Applicant (Include ZIP Code) Arch Chemicals Inc 5660 New Northside Drive NW Suite 1100 Atlanta GA 30328 <input type="checkbox"/> 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

<input type="checkbox"/> Amendment Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> Me Too Application
<input checked="" type="checkbox"/> Notification Explain below	<input type="checkbox"/> Other Explain below

Explanation Use additional page(s) if necessary (For Section I and Section II)

Not Subject to PRIA

Label Notification to move the First Aid and Precautionary Statements etc See cover letter for details

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 98 10 and 40 CFR 152 46 this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA

Signature Joanna Holcombe Date 6-4-12

Section - III

1 Material This Product Will Be Packaged In			
Child Resistant Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>*Certification must be submitted</i>	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes No per Unit Packaging wgt container	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes No per Package wgt container	2 Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify)
3 Location of Net Contents Information <input type="checkbox"/> Label <input checked="" type="checkbox"/> Container	4 Size(s) Retail Container Various	5 Location of Label Directions <input checked="" type="checkbox"/> On Label <input checked="" type="checkbox"/> On labeling accompanying product	
6 Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			

Section - IV

1 Contact Point (Complete items directly below for identification of individual to be contacted if necessary to process this application)		
Name Joanna Holcombe	Title Sr Commercial Regulatory Services Associate	Telephone No. (Include Area Code) 678 627 4336
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		6 Date Application Received (Stamped)
2 Signature <u>Joanna Holcombe</u>	3 Title Sr Commercial Regulatory Services Associate	
4 Typed Name Joanna Holcombe	5 Date <u>6-4-12</u>	

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Via FedEx

Arch Chemicals Inc
5660 New Northside Drive NW Suite 1100
Atlanta GA 30328 USA

Ms Monisha Harris PM 32
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
US Environmental Protection Agency
Room S 4900 One Potomac Yard
2227 S Crystal Drive
Arlington VA 22202

Joanna Holcombe
Lonza Microbial Control
Commercial Regulatory Services

Tel 678 627 2336
Fax 678 627 2081
joanna.holcombe@lonza.com

June 4 2012

**SUBJECT HTH 300 Gram Tablets EPA Reg No 1258 1233
Label Notification**

Dear Ms Harris

Arch Chemicals Inc is now a part of Lonza On behalf of Arch Chemicals I am submitting an application to make the following changes to the abovementioned product label

Page 1	<ul style="list-style-type: none"> • Add the words Note to reviewer to the box explaining the use of brackets and braces • Add optional Spanish signal word • Move First Aid and Precautionary Statements to page 2 and add a Note to reviewer and the following referral statement <i>See [left] [right] [back] [side] panel for Precautionary and First Aid Statements</i> Other EPA registered swimming pool products such as 5185 144 (BioGuard Master Trichloro Compacted) and 5185 501 (BioGuard Silk) are allowed to put the referral statement on the front
Page 3	<ul style="list-style-type: none"> • Revise optional contact information
Page 5	<ul style="list-style-type: none"> • Add optional Spanish statement and English translation with accompanying Note to reviewer above Directions for Use <i>{If the following Spanish statement is used it must appear directly above DIRECTIONS FOR USE }</i> <i>Si usted no entiende la etiqueta busque a alguien para que se la explique a usted en detalle (If you do not understand the label find someone to explain it to you in detail)</i>

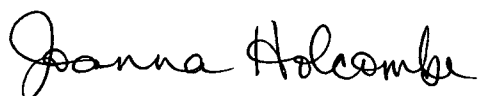
Please find the enclosed documents in support of this notification

- Application for Notification
- Certification with Respect to Label Integrity
- CD with label and
- One copy of the proposed label with changes highlighted

2/2 June 4 2012 HTH 300 Gram Tablets EPA Reg No 1258 1233 Label Notification

If you have any questions or need any additional information please feel free to contact me at 678
627 2336

Sincerely
Lonza Inc

A handwritten signature in black ink that reads "Joanna Holcombe". The signature is written in a cursive, flowing style.

Joanna Holcombe
Sr Commercial Regulatory Services Associate

Note to reviewer

[Items in brackets [AAA] are optional and may/may not be included on final label]

{Items in braces {AAA} are for information purposes and will not appear on final label}

HTH 300 GRAM TABLETS

ACTIVE INGREDIENT CALCIUM HYPOCHLORITE	68%
OTHER INGREDIENTS	32%
TOTAL	100%

MINIMUM AVAILABLE CHLORINE 65%

KEEP OUT OF REACH OF CHILDREN

NOTIFICATION
 Data Reviewed 2/12
 Reviewed By [Signature]

DANGER [PELIGRO]

Contamination or improper use may cause intense fire explosion or the release of toxic gases Do not allow product to contact any foreign matter including other water treatment products **If product is exposed to small amounts of water it can react violently to produce heat and toxic gases and spatter** {Optional – for use on residential use swimming pool products} **[Do not mix this product with a small amount of water Only add directly to your pool or spa] Do not add water to this product Add only into water** {Optional – for use on residential use swimming pool and spa products} **[Do not remove floater or other dispensing device from water for more than five minutes if it contains tablets or tablet residue]**
Highly corrosive Causes skin and eye damage May be fatal if swallowed

Read all precautionary statements on label and first aid statements before use

DO NOT ADD THIS PRODUCT TO ANY FLOATER OR FEEDER THAT CONTAINS ANY OTHER PRODUCT

{Note to reviewer Although this product has a Danger' signal word as per the EPA label review manual The Agency may permit reasonable variations in the placement of the First Aid statement as long as the reference statement See First Aid (or Statement of Practical Treatment) on (identify appropriate panel) appears on the front panel If the First Aid Statements are placed on the front panel of the final graphic label the statement below will not be used }

See [left] [right] [side] [back] panel for precautionary and first aid statements

Sold by
 Arch Chemicals Inc
 P O Box 723547
 Atlanta GA 31139 3547

EPA Reg No 1258 1233
 EPA Est No Xxx yy zz
 Net Wt xxx

{ The following uses are not approved in California Hubbard and Immersion Tanks Maine Lobster Ponds and Conditioning Live Oysters }

PRECAUTIONARY STATEMENTS**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

DANGER Highly corrosive Causes skin and eye damage May be fatal if swallowed Irritating to nose and throat

- Open in a well ventilated area Avoid breathing dust and fumes
- Do not get in eyes on skin or on clothing Do not handle with bare hands Wear goggles and use rubber gloves For additional protection of skin wear long sleeves and long pants
- Remove and wash contaminated clothing before reuse
- Only use utensils that are thoroughly clean and dry

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 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 a 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

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

IN CASE OF EMERGENCY CALL 1 800 654 6911

PHYSICAL and CHEMICAL HAZARDS

If product is exposed to small amounts of water it can react violently to produce heat and toxic gases and spatter Do not add water to this product Add only into water

- Do not allow to become wet or damp before use

Can react with other materials including other water treatment products to cause intense fire explosion and the release of toxic gases

- Keep all foreign matter including other water treatment products away from this product
- Do not use this product in a floater or feeder that has been used with any other product
- Do not allow this product to contact other water treatment products If used with a skimmer make sure skimmer is completely clean and free of residue from other water treatment products before putting this product in a skimmer

Exposure to heat can cause this product to rapidly decompose leading to intense fire explosion and the release of toxic gases

- Store in a cool dry well ventilated area

Strong oxidizing agent This product can increase fire intensity Keep away from flame or burning material (like a lighted cigarette)

{Environmental hazards statement for end use products in containers less than 5 gallons (liquid) or less than 50 pounds (solid dry weight) use only the first sentence All other products use the full paragraph }

ENVIRONMENTAL HAZARDS This pesticide is toxic to fish and aquatic organisms Do not discharge effluent containing this product into lakes ponds streams 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 local sewage treatment plant authority For guidance contact your State Water Board or Regional Office of the EPA

STORAGE & DISPOSAL {Optional statements – usage depends on whether or not refillable or nonrefillable containers are used and whether or not product is packaged for household/residential use only}

{Nonrefillable container household/residential use}

[Keep this product dry in its tightly closed container when not in use Store in a cool dry well ventilated area Keep away from heat or open flame Nonrefillable container Do not reuse or refill this container Rinse empty container thoroughly with water to dissolve all material prior to disposal Offer for recycling if available Do not contaminate food or feed by storage or disposal or cleaning of equipment FOR DISPOSAL OF A CONTAMINATED OR DECOMPOSING PRODUCT SEE EMERGENCY HANDLING]

{Refillable container – household/residential use}

[Keep this product dry in its tightly closed container when not in use Store in a cool dry well ventilated area Keep away from heat or open flame Do not contaminate food or feed by storage or disposal or cleaning of equipment FOR DISPOSAL OF A CONTAMINATED OR DECOMPOSING PRODUCT SEE EMERGENCY HANDLING Refillable container Refill this container with calcium hypochlorite only Do not use this container for any other purpose Rinse empty container thoroughly with water to dissolve all material prior to disposal]

{Nonrefillable container non household/residential use}

[Keep this product dry in its tightly closed container when not in use Store in a cool dry well ventilated area Keep away from heat or open flame Do not contaminate food or feed by storage or disposal or cleaning of equipment FOR DISPOSAL OF A CONTAMINATED OR DECOMPOSING PRODUCT SEE EMERGENCY HANDLING Nonrefillable container Do not reuse this container Offer for recycling if available Rinse empty container thoroughly with water to dissolve all material prior to disposal]

{Refillable container – non household/residential use}

[Keep this product dry in its tightly closed container when not in use Store in a cool dry well ventilated area Keep away from heat or open flame Do not contaminate food or feed by storage or disposal or cleaning of equipment FOR DISPOSAL OF A CONTAMINATED OR DECOMPOSING PRODUCT SEE EMERGENCY HANDLING Refillable container Refill this container with calcium hypochlorite only Do not use this container for any other purpose Cleaning of this container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller Rinse empty container thoroughly with water to dissolve all material prior to disposal]

EMERGENCY HANDLING In case of contamination or decomposition – Do not reseal container Immediately remove container to an open and well ventilated outdoor area by itself Flood with large amounts of water Dispose of the container and any remaining contaminated material in an approved landfill area

[[HTH®] [Sock It®] [Super Sock It®] and [pH Plus®] [Pulsar®] [DryTec®] [ConstantChlor®] [CCH®] (brand name) are registered trademarks of Arch Chemicals Inc]



{Optional} []



{Optional} [**HTH**] [brand] [HELPLINE
Toll Free 800 [HTH] [brand] POOL (800 484 7665)
(866 4POOLFUN)
Call 7 days a week with your questions concerning
pool water care 8 00 a m 10 00 p m Eastern Time]
[Visit [brand] [www xxx com](http://www.xxx.com)]

{OPTIONAL MARKETING CLAIMS}**{Statements available to all labels}**

[Kills bacteria]

[Controls algae]

[Destroys organic contaminants] [in] [pools] [and] [industrial commercial or municipal water systems as described on this label]

[Provides steady source of chlorine]

[68% available chlorine]

[Provides effective chlorination at an economical price]

[Easy to use]

[Dissolves slowly for continuous chlorination]

[Kills bacteria destroys organic contaminants and controls algae]

[Controls algae]

[Destroys organic contaminants]

[Kills bacteria]

[Eliminates bacteria]

[Destroys bacteria]

[Restores clarity to pool water]

[Add [tablet/cube/capsule/caplet] to skimmer]

[Good for all pool surfaces]

[Designed for use in [brand] system]

[Designed for use in the skimmer or a floater]

[For routine use in skimmers]

[For routine use in floaters]

[For routine use in feeders]

[Contains no cyanuric acid]

[Sanitizes pool water]

[Swimming pool sanitizer]

[No risk of over stabilization]

[Will not cause over stabilization]

[[brand] system]

[Step x]

{Optional statements for inclusion on dealer direct brands}

[Step 1 Sanitize]

[Step 2 Shock]

[Step 3 Prevent Algae]

[Food Grade]

[For Food Contact Applications] {Refers to item in the directions for use}

[Contains antiscald Additive]

[Anti scale formulation]

[Scale control additive to reduce maintenance]

[Reduced maintenance formulation]

*{If the following Spanish statement is used it must appear directly above DIRECTIONS FOR USE }
Si usted no entiende la etiqueta busque a alguien para que se la explique a usted en detalle (If you do not understand the label find someone to explain it to you in detail)*

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

READ ALL PRECAUTIONARY STATEMENTS BEFORE USE

{Use 1} [Swimming pools

[This product is designed to dissolve slowly providing a steady source of available chlorine in swimming pools to control the growth of algae kill bacteria and destroy organic contaminants] [For best results follow a weekly program with our [brand] System Consult your authorized [brand] dealer for advice on the system that best suits your pool and your lifestyle] [Take a pool water sample to your authorized [brand] dealer regularly for a detailed water sample]

HOW TO USE Do not allow this product to contact other water treatment products Do not mix with other products or dissolve before use [Do not pre mix this product] [Only add this product directly to your pool] One [tablet] [cube] weighs approximately 10 ounces Add the recommended dosages of this product during evening hours while the filter pump is running [You can measure the product in two ways use the clean dry scoop if provided or use the markings on the container if a scoop is not provided Do not use any other scoop Do not use the scoop for any other purpose]

[You may place the product into your pool in the following ways

- 1 Use a floating dispenser or feeder designed for this product Use only new feeders or floaters or ones that have previously contained only this product
- 2 Use the skimmer Skimmer basket should be clean and free of all other water treatment products before adding recommended amount of this product

Do not reuse floaters or feeders from other brands of dry chlorinator tablets

Do not throw tablets directly into pool or use in any chlorinating device that has been used with other chlorinating compounds]

[Alternate Directions for use in [Brand] Feeder

Before use read the appropriate installation instructions and operating manual for your [Brand] Feeder

- 1 Start the filter pump and check chlorine residual with a reliable test kit
- 2 Fill the tablet container with this product only Adjust chlorine feed rate setting according to the operating instructions in the feeder manual After 24 hours check the chlorine residual If 1 to 4 ppm leave the feed rate setting if below 1 ppm increase the feed rate Allow sufficient time (e.g. one day) after changing the feed rate setting for the chlorine residual to readjust The pool should not be re entered until the 1 to 4 ppm chlorine residual is established
- 3 Always maintain pH between 7.2 and 7.6 by using a suitable pH adjuster according to directions on the label for such products
- 4 If cyanuric acid is used to stabilize available chlorine follow label directions for this product and maintain the chlorine residual at 1 to 4 ppm as determined by the test kit
- 5 Refer to operating manuals for feed rate information]

[WATER BALANCE For best product performance swimmer comfort and crystal clear water maintain pH in the 7.2-7.6 range Maintain total alkalinity in the 60-120 parts per million (ppm) ranges Maintain calcium hardness above 200 ppm Use a reliable test kit that measures all these ranges Use the [HTH Pool Care Products] (brand name) to make adjustments Follow label directions for each product]

[OPENING YOUR POOL Adjust and maintain pH in the 7.2 to 7.6 range Follow Shock Treatment directions on this package [Allow this product to dissolve completely] Test free available chlorine residual with a pool test kit DO NOT re enter pool until the free available chlorine residual is 1 to 4 ppm {For Industrial/Municipal pool labels } [Reenter pool when residual is 1-4 ppm or when chlorine residual meets local public health guidelines]

Repeat treatment as needed See directions for use in feeder for routine chlorination]
[ROUTINE CHLORINATION Throughout the pool season adjust and maintain pH to 7.2-7.6
FOR UNSTABILIZED POOLS Begin by using 3 tablets per 10 000 gallons of pool water
FOR POOLS STABILIZED USING [brand name] [HTH STABILIZER CONDITIONER] Begin by using 1 tablet
per 10 000 gallons of pool water

FOR UNSTABILIZED AND STABILIZED POOLS After each day use a suitable test kit to check free available chlorine residual Increase or decrease the number of tablets to maintain a free available chlorine residual of 1-4 ppm [Allow product to dissolve completely] Do not remove product from [skimmer] or [feeder] until completely dissolved Follow [How to Use] or [Directions Use]

[SHOCK TREATMENT Adjust and maintain pH to 7.2-7.6 with [brand] Follow label directions Use a [brand] product Follow label directions on those products Follow HOW TO USE directions on this package DO NOT re enter pool until the free available chlorine residual is 1 to 4 parts per million (ppm)]

[SHOCK TREATMENT / SUPERCHLORINATION For best results see WATER BALANCE and HOW TO USE section above before treatment Every 7 days or as necessary to prevent pool problems shock treat / superchlorinate the pool [by adding one cube [tablet caplet capsule] of this product per 5000 gal of water to provide 10 ppm of available chlorine [10-20 ounces of this product [(1 or 2 cubes)] [tablets caplets capsules] per 10 000 gallons of water to provide 5 to 10 ppm available chlorine] Place the [cubes] [tablets] [caplets] [capsules] in the pool skimmer with the pump operating until completely dissolved Additional shock treatments may be required to correct problems which are caused by visible algae high bathing loads heavy wind rainstorms also to correct problems such as unpleasant odors and eye irritation Check the available chlorine with a suitable test kit DO NOT re enter pool until the free available chlorine residual is 1 to 4 parts per million (ppm) as measured by a suitable pool test kit]

[ALGAE CONTROL Follow Shock Treatment directions on this label DO NOT enter pool until the free available chlorine residual is 1-4 ppm If necessary repeat the treatment To prevent possible staining take the following steps IMMEDIATELY after treatment Thoroughly clean pool by brushing surface of algae growth vacuum and cycle through filter]

[WINTERIZING Use an HTH Chlorine Shock or Algaecide product Follow label directions on that product Cover the pool with a pool cover Prepare the heater pump and filter components for winterizing by following manufacturer s directions]

{Use 2} [Spa & Hot Tubs

Apply 0.5 oz of product per 500 gallons of water to obtain a free available chlorine concentration of 5 ppm as determined by a suitable chlorine test kit Adjust and maintain pool water pH to between 7.2 and 7.6 Some oils lotions fragrances cleaners etc may cause foaming or cloudy water as well as reduce the efficiency of the product
To maintain the water apply 0.5 oz of product per 500 gallons of water over the surface to maintain a chlorine concentration of 5 ppm Do not enter spa until chlorine residual is 2.5 ppm After each use shock with 1.5 oz of this product per 500 gallons of water to control odor and algae]

{ICM dosing regimens}

Concentration ppm		Tablet = approximately 10 ounces (300 g)	
Nominal	Actual	Number	Volume (Gal)
1	1.0	1	50000
5	5.1	1	10000
10	10.3	1	5000
25	25.7	1	2000
50	51.4	1	1000
100	102.9	1	500
200	205.8	1	250
500	514.4	1	100

600	605 2	1	85
1000	1028 8	1	50
4000	4115 1	2	25

{Use 3} [HUBBARD AND IMMERSION TANKS [Not approved in California] Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 25 ppm is achieved as determined by a suitable test kit Adjust and maintain the water pH to between 7.2 and 7.6 After each use drain the tank Circulate this solution through the agitator of the tank for 15 minutes and then rinse out the solution Clean tank thoroughly and dry with clean cloths

[HYDROTHERAPY TANKS – Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved as determined by a suitable chlorine test kit after satisfying any chlorine demand Tank should not be entered until the chlorine residual is below 3 ppm Adjust and maintain the water pH to between 7.2 and 7.6 Operate pool filter continuously Drain pool weekly and clean before refilling]

{Use4} [SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES

RINSE METHOD A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 ppm Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 100 ppm is achieved as determined by a suitable test kit

Clean equipment surfaces in the normal manner Prior to use rinse all surfaces thoroughly with the sanitizing solution maintaining contact with the sanitizer for at least 2 minutes If solution contains less than 50 ppm available chlorine as determined by a suitable test kit either discard the solution or add sufficient product to reestablish a 200 ppm residual Do not rinse equipment with water after treatment and do not soak equipment overnight Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes

IMMERSION METHOD A solution of 100 ppm available chlorine may be used in the sanitizing solution if a chlorine test kit is available Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to insure that the available chlorine does not drop below 50 ppm Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 100 ppm is achieved as determined by a suitable test kit

Clean equipment in the normal manner Prior to use immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain If solution contains less than 50 ppm available chlorine as determined by a suitable test kit either discard the solution or add sufficient product to reestablish a 200 ppm residual Do not rinse equipment with water after treatment

Sanitizers used in automated systems may be used for general cleaning but may not be reused for sanitizing purposes

FLOW/PRESSURE METHOD Disassemble equipment and thoroughly clean after use Assemble equipment in operating position prior to use Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110 % of volume capacity of the equipment Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit Pump solution through the system until full flow is obtained at all extremities the system is completely filled with the sanitizer and all air is removed from the system Close drain valves and hold under pressure for at least 2 minutes to insure contact with all internal surfaces Remove some cleaning solution from drain valve and test with a chlorine test kit Repeat entire cleaning/sanitizing process if effluent contains less than 50 ppm available chlorine

CLEAN IN PLACE METHOD Thoroughly clean equipment after use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110 % of volume capacity of the equipment. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Pump solution through the system until full flow is obtained at all extremities; the system is completely filled with the sanitizer and all air is removed from the system. Close drain valves and hold under pressure for at least 10 minutes to insure contact with all internal surfaces. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/ sanitizing process if effluent contains less than 50 ppm available chlorine.

[COARSE] SPRAY METHOD – Pre clean all surfaces after use. Use a 200 ppm available chlorine solution to control bacteria, mold or fungi, and a 600 ppm solution to control bacteriophage. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, or use a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved, as determined by a suitable test kit. Use spray equipment which can resist hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Thoroughly spray all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces treated with a 600 ppm solution with a 200 ppm solution.]

{Use 5} [SANITIZATION OF POROUS FOOD CONTACT SURFACES

RINSE METHOD Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved, as determined by a suitable test kit. Clean surfaces in the normal manner. Rinse all surfaces thoroughly with the 600 ppm solution, maintaining contact for at least 2 minutes. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Do not rinse and do not soak equipment overnight.

IMMERSION METHOD Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved, as determined by a suitable test kit. Clean equipment in the normal manner. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Prior to using, immerse equipment in the 200 ppm sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse and do not soak equipment overnight.

[COARSE] SPRAY METHOD –Pre clean all surfaces after use. Using a suitable chemical feed dispenser and test kit, dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved as determined by a suitable test kit. Use spray equipment which can resist hypochlorite solutions. Always empty and rinse spray equipment with potable water after use. Thoroughly spray all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours. Prior to using equipment, rinse all surfaces with a 200 ppm available chlorine solution. Using a suitable chemical feed dispenser and test kit, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit.]

{Use 6} [SANITIZATION OF NONPOROUS NON FOOD CONTACT SURFACES

RINSE METHOD Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Clean equipment surfaces in the normal manner. Prior to use, rinse all surfaces thoroughly with the sanitizing solution, maintaining contact with the sanitizer for at least 2 minutes. Do not rinse equipment with water after treatment and do not soak equipment overnight.

IMMERSION METHOD Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Clean equipment in the normal manner. Prior to use, immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain. Do not rinse equipment with water after treatment.

[COARSE] SPRAY METHOD Pre-clean all surfaces after use. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Use spray equipment which can resist hypochlorite solutions. Prior to using equipment, thoroughly spray all surfaces until wet, allowing excess sanitizer to drain. Vacate area for at least 2 hours.]

{Use 7} [DISINFECTION OF NONPOROUS NON FOOD CONTACT SURFACES

RINSE METHOD Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved as determined by a suitable test kit Clean equipment surfaces in the normal manner Prior to use rinse all surfaces thoroughly with the disinfecting solution maintaining contact with the solution for at least 10 minutes Do not rinse equipment with water after treatment and do not soak equipment overnight

IMMERSION METHOD Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved as determined by a suitable test kit Clean equipment in the normal manner Prior to use immerse equipment in the disinfecting solution for at least 10 minutes and allow the sanitizer to drain Do not rinse equipment with water after treatment]

{Use 8} [SANITIZATION OF POROUS NON FOOD CONTACT SURFACES

RINSE METHOD Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved as determined by a suitable test kit Clean surfaces in the normal manner Prior to use rinse all surfaces thoroughly with the sanitizing solution maintaining contact with the sanitizer for at least 2 minutes Do not rinse equipment with water after treatment and do not soak equipment overnight

IMMERSION METHOD Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved as determined by a suitable test kit Clean equipment in the normal manner Prior to use immerse equipment in the sanitizing solution for at least 2 minutes and allow the sanitizer to drain Do not rinse equipment with water after treatment

[COARSE] SPRAY METHOD Cleaning and sanitizing non food contact surfaces with 600 ppm available chlorine solution Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved as determined by a suitable test kit Use spray equipment which can resist hypochlorite solutions Always empty and rinse spray equipment with potable water after use Prior to using equipment thoroughly spray all surfaces until wet allowing excess sanitizer to drain Vacate area for at least 2 hours]

{Use 9} [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 waste water 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 waste water disinfection

- 1 Mixing It is imperative that the product and the waste water be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the waste water
- 2 Contacting Upon flash mixing the flow through of 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]

{Use 10} [SEWAGE AND WASTEWATER TREATMENT

EFFLUENT SLIME CONTROL Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 100 to 1000 ppm is achieved as determined by a suitable test kit Once control is evident apply a 15 ppm available chlorine solution Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 15 ppm is achieved as determined by a suitable test kit

FILTER BEDS SLIME CONTROL Remove filter from service drain to a depth of 1 ft above filter sand and add 1 tablet {one 16 oz tablet} of this 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]

{Use 11} [DISINFECTION OF DRINKING WATER (EMERGENCY/PUBLIC/INDIVIDUAL SYSTEMS)

PUBLIC SYSTEMS Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 0.2 – 0.6 ppm is achieved as determined by a suitable test kit 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 Primary Drinking Water Regulations Contact your local Health Department for further details

INDIVIDUAL SYSTEMS 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 Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 100 ppm is achieved as determined by a suitable test kit After covering the well pour the sanitizing solution into the well through both the pipe sleeve opening and the pipeline Wash the exterior of the pump cylinder also with the sanitizing solution 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 Contact your local Health Department for further details

INDIVIDUAL WATER SYSTEMS DRILLED DRIVEN & BORED WELLS Run pump until water is as free from turbidity as possible Pour a 100 ppm available chlorine sanitizing solution into the well Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 100 ppm is achieved as determined by a suitable test kit 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

INDIVIDUAL WATER SYSTEMS FLOWING ARTESIAN WELLS Artesian wells generally do not require disinfection If analyses 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 grain of this product to 1 gallon of water One grain is approximately the size of the letter o in this sentence 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

{Use 12} [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. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved, as determined by a suitable test kit. Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and return to surface.

NEW FILTER SAND Apply one tablet (one 16 oz. tablet) 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. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 50 ppm is achieved, as determined by a suitable test kit. 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. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved, as determined by a suitable test kit. 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 chlorinated solution. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 1000 ppm is achieved. After drying, flush with water and return to service.]

{Use 13} [EMERGENCY DISINFECTION AFTER FLOODS

WELLS Thoroughly flush contaminated casing with a 500 ppm available chlorine solution. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved, as determined by a suitable test kit. 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] [Treat well again] if water samples are biologically unacceptable.

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 using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved, 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. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 1000 ppm is achieved, as determined by a suitable test kit. Allow to stand for 2 to 4 hours, flush, and return to service.

FILTERS When the sand filter needs replacement, apply 1 tablet (one 16 oz. tablet) of this product for each 100 to 150 cubic feet of sand. When the filter is severely contaminated, additional product should be distributed over the surface at the rate of 1 tablet (one 16 oz. tablet) 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 back washed of mud and silt, apply 16 oz. 1 tablet (one 16 oz. tablet) 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 back washing.

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

{Use 14} [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 at least 0.1 to 0.2 ppm at the point where the untreated supply enters the regular distribution system. Use a chlorine test kit]

{Use 15} [EMERGENCY DISINFECTION AFTER DROUGHTS

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]

WATER SHIPPED IN BY TANKS, TANK CARS, TRUCKS, ETC Thoroughly clean all containers and equipment. Spray a 500 ppm available chlorine solution and rinse with potable water after 5 minutes. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved, as determined by a suitable test kit. During the filling of the containers, dose with sufficient amounts of this product to provide at least a 0.2 ppm chlorine residual. Use a chlorine test kit]

{Use 16} [EMERGENCY DISINFECTION AFTER MAIN BREAKS

MAINS before assembly of the repaired section, flush out mud and soil. 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]

{Use 17} [COOLING TOWER/EVAPORATIVE CONDENSER WATER

SLUG FEED METHOD Initial dose: When system is noticeably fouled, use a suitable chemical feed dispenser and dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved, as determined by a suitable test kit. Repeat until control is achieved. Subsequent dose: When microbial control is evident, use a suitable chemical feed dispenser and dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved, as determined by a suitable test kit. Add to the system daily, or as needed to maintain control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.

INTERMITTENT FEED METHOD Initial Dose: When system is noticeably fouled, use a suitable chemical feed dispenser and dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved, as determined by a suitable test kit. 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 blow down. Subsequent Dose: When microbial control is evident, use a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved, as determined by a suitable test kit. 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 blow down. Badly fouled systems must be cleaned before treatment is begun.

CONTINUOUS FEED METHOD Initial dose: when system is noticeably fouled, use a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved, as determined by a suitable test kit. [Subsequent Dose: Maintain this treatment level by using a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of ppm is achieved, as determined by a suitable test kit. Badly fouled systems must be cleaned before treatment is begun.]

BRIQUETTES OR TABLETS Initially slug dose the system using a suitable chemical feed dispenser, dissolving and dosing the chlorinated solution until a concentration of 5 ppm is achieved, as determined by a suitable test kit. Badly fouled systems must be cleaned before treatment is begun. Subsequent Dose: When microbial control is evident, use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved, as determined by a suitable test kit. Control and keep the chlorine residual at 1 ppm. Badly fouled systems must be cleaned before treatment is begun.]

{Use 18} [LAUNDRY SANITIZERS

Household Laundry Sanitizers

IN SOAKING SUDS Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit Wait 5 minutes then add soap or detergent Immerse laundry for at least 11 minutes prior to starting the wash/rinse cycle

IN WASHING SUDS Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit Wait 5 minutes then add soap or detergent and start the wash/rinse cycle

Commercial Laundry Sanitizers Wet fabrics or clothes should be spun dry prior to sanitization Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit Promptly after mixing the sanitizer add the solution into the prewash prior to washing fabrics/clothes in the regular wash cycle with a good detergent Test the level of available chlorine if solution has been allowed to stand Add more of this product if the available chlorine level has dropped below 200 ppm

Federally Inspected Meat & Poultry Plant Laundry Sanitizers Wet fabrics which contact meat or poultry products directly or indirectly should be spun dry prior to sanitization Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit Promptly after mixing the sanitizer add the solution into the prewash prior to washing fabrics in the regular wash cycle with a good detergent Test the level of available chlorine if solution has been allowed to stand Add more of this product if the available chlorine level has dropped below 200 ppm Thoroughly rinse fabrics with potable water at the end of the laundering operation]

{Use 19} [FARM PREMISES

Remove all animals poultry and feed from premises vehicles and enclosures Remove all litter and manure from floors walls and surfaces of barns pens stalls chutes and other facilities occupied or traversed by animals or poultry Empty all troughs racks and other feeding and watering appliances Thoroughly clean all surfaces with soap or detergent and rinse with water To disinfect saturate all surfaces with a solution of at least 1000 ppm available chlorine for a period of 10 minutes Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 1000 ppm is achieved as determined by a suitable test kit Immerse all halters ropes and other types of equipment used in handling and restraining animals or poultry as well as the cleaned forks shovels and scrapers used for removing litter and manure Ventilate buildings cars boats and other closed spaces Do not house livestock or poultry or employ equipment until chlorine has been dissipated All treated feed racks mangers troughs automatic feeders fountains and waterers must be rinsed with potable water before reuse]

{Use 20} [PULP AND PAPER MILL PROCESS WATER SYSTEMS

SLUG FEED METHOD Initial Dose When system is noticeably fouled use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved as determined by a suitable test kit Repeat until control is achieved Subsequent Dose When microbial control is evident use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved as determined by a suitable test kit Maintain control and keep the chlorine residual at 1 ppm Badly fouled systems must be cleaned before treatment is begun

INTERMITTENT FEED METHOD Initial Dose when system is noticeably fouled use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved as determined by a suitable test kit 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 blow down Subsequent Dose When microbial control is evident use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved 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 blow down Badly fouled systems must be cleaned before treatment is begun

CONTINUOUS FEED METHOD Initial dose When system is noticeably fouled use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved as determined by a suitable test kit Subsequent Dose Maintain this treatment level by using a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved Badly fouled systems must be cleaned before treatment is begun

BRIQUETTES OR TABLETS Initially slug dose the system using a suitable chemical feed dispenser dissolving and dosing the chlorinated solution until a concentration of 5 ppm is achieved as determined by a suitable test kit Badly fouled systems must be cleaned before treatment is begun Subsequent Dose When microbial control is evident use a suitable chemical feed dispenser dissolving and dosing the chlorinated solution until a concentration of 1 ppm is achieved as determined by a suitable test kit Badly fouled systems must be cleaned before treatment is begun]

{Use 21} [AGRICULTURAL USES

POST HARVEST PROTECTION Potatoes can be sanitized after cleaning and prior to storage by spraying with a sanitizing solution at a level of 1 gallon of sanitizing solution per 1 ton of potatoes Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved as determined by a suitable test kit

Disinfect leaf cutting bee cells and bee boards by immersion in a solution containing 1 ppm available chlorine for 3 minutes Allow cells to drain for 2 minutes and dry for 4 to 5 hours or until no chlorine odor can be detected Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 1 ppm is achieved as determined by a suitable test kit The bee domicile is disinfected by spraying with a 0.1 ppm solution until all surfaces are thoroughly wet Again use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 0.1 ppm is achieved as determined by a suitable test kit Allow the domicile to dry until all chlorine odor has dissipated

FOOD EGG SANITIZATION Thoroughly clean all eggs Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved as determined by a suitable test kit The sanitizer temperature should not exceed 130 F Spray the warm sanitizer so that the eggs are thoroughly wetted Allow the eggs to thoroughly dry before casing or breaking Do not apply a potable water rinse The solution should not be reused to sanitize eggs

FRUIT & VEGETABLE WASHING Thoroughly clean all fruits and vegetables in a wash tank Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 25 ppm is achieved as determined by a suitable test kit After draining the tank submerge fruit or vegetables for 2 minutes in a second wash tank containing the recirculating sanitizing solution Spray rinse vegetables with the sanitizing solution prior to packaging Rinse fruit with potable water only prior to packaging

SEEDS To control bacterial spot (*Xanthomonas vesicatoria*) on Pimento seeds initially remove moist seeds from ripe fruits To control surface fungi and bacteria on Tomato seeds initially wash seeds Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 39 000 ppm is achieved as determined by a suitable test kit Immediately soak seeds in 39 000 ppm solution for 15 minutes with continuous agitation After treatment rinse seeds in potable water for 15 minutes Dry seeds to normal moisture

MUSHROOMS To control bacterial blotch (*Pseudomonas tolaasii*) use a 100 to 200 ppm solution prior to watering mushroom production surfaces Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 100 to 200 ppm is achieved as determined by a suitable test kit The first application should begin when pins form and thereafter between breaks on a need basis depending on the occurrence of bacterial blotch This product may be applied directly to pins to control small infection foci Apply 1.5 to 2.0 oz per square foot of growing space

POST HARVEST ROOTS To control and reduce the spread of soft rot causing organisms in water and on sweet potatoes (*Ipomoea batatas*) spray or dip the potatoes with a 150 to 500 ppm solution for 2 to 5 minutes Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 150 to 500 ppm is achieved as determined by a suitable test kit Change the solution after one hour or as needed]

{Use 22} [AQUACULTURAL USES]

FISH PONDS Remove fish from ponds prior to treatment. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 10 ppm is achieved. Add more product to the water if the available chlorine level is below 1 ppm after 5 minutes. Return fish to pond as determined by a suitable test kit after the available chlorine level reaches zero.

FISH POND EQUIPMENT Thoroughly clean all equipment prior to treatment. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Porous equipment should soak for one hour.

MAINE LOBSTER PONDS [Not approved in California] Remove lobsters, seaweed, etc. from ponds prior to treatment. Drain the pond. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved, as determined by a suitable test kit. Apply so that all barrows, gates, rock, and dam are treated with product. Permit high tide to fill the pond and then close gates. Allow water to stand for 2 to 3 days until the available chlorine level reaches zero. Open gates and allow 2 tidal cycles to flush the pond before returning lobsters to pond.

CONDITIONING LIVE OYSTERS [Not approved in California] Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 0.5 ppm is achieved, as determined by a suitable test kit. Maintain the temperature at 50 to 70 F. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05 ppm. Repeat entire process if the available chlorine level drops below 0.05 ppm or the temperature falls below 50 F.

CONTROL OF SCAVENGERS IN FISH HATCHERY PONDS Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved, as determined by a suitable test kit. Pour into drained pond potholes. Repeat if necessary. Do not put desirable fish back into refilled ponds until chlorine residual has dropped to 0 ppm, as determined by a test kit.]

{Use 23} [SANITIZATION OF DIALYSIS MACHINES]

Flush equipment thoroughly with water prior to using this product. Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved, as determined by a suitable test kit. Immediately use this product in the hemodialysate system, allowing for a minimum contact time of 15 minutes at 20 C. Drain system of the sanitizing solution and thoroughly rinse with water. Discard and DO NOT reuse the spent sanitizer. Rinsate must be monitored with a suitable test kit to insure that no available chlorine remains in the system.

This product is recommended for decontaminating single and multipatient hemodialysate systems. This product has been shown to be an effective disinfectant (virucide, fungicide, bactericide, pseudomonicide) when tested by AOAC and EPA test methods. This product may not totally eliminate all vegetative microorganisms in hemodialysate delivery systems due to their construction and/or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. This product should be used in a disinfectant program which includes bacteriological monitoring of the hemodialysate delivery system. This product is NOT recommended for use in hemodialysate or reverse osmosis (RO) membranes. Consult the guidelines for hemodialysate systems available from the Hepatitis Laboratories, CDC, Phoenix, AZ 85021.]

{Use 24} [TOILET BOWL SANITIZERS]

[These products are marketed as individual packages for placement in the toilet. Therefore, use directions are not appropriate.]

{Use 25} [ASPHALT OR WOOD ROOFS AND SIDINGS]

To control fungus and mildew, first remove all physical soil by brushing and hosing with clean water, and apply a 5000 ppm available chlorine solution using a suitable chemical feed dispenser. Brush or spray roof or siding with this solution. After 30 minutes, rinse by hosing with clean water.]

{Use 26} [BOAT BOTTOMS

To control slime on boat bottoms sling a plastic tarp under boat retaining enough water to cover the fouled bottom area but not allowing water to enter enclosed area This envelope should contain approximately 500 gallons of water for a 14 foot boat Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 35 ppm is achieved as determined by a suitable test kit Leave immersed for 8 to 12 hours Repeat if necessary Do not discharge the solution until the free chlorine level has dropped to 0 ppm as determined by a swimming pool test kit]

{Use 27} [ARTIFICIAL SAND BEACHES

To sanitize the sand spray a 500 ppm available chlorine solution at frequent intervals Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 500 ppm is achieved as determined by a suitable test kit Small areas can be sprinkled with a watering can]

{Use 28} [FOOD PROCESSING PLANTS**TREATMENT OF FEDERALLY INSPECTED MEAT & POULTRY PLANT POTABLE WATER SUPPLIES**

Solutions of this product containing 1% available chlorine will effectively disinfect the water supply in Federally Inspected Meat & Poultry Plants The solutions should be fed into the water supply by a hypochlorinator on the intake side of the pump An available chlorine residual of 0.1 to 0.6 ppm must be maintained throughout the water distribution system to assure adequate disinfection A regular testing program should be initiated to make sure that the proper chlorine residuals are present at all times To make a 1% solution use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 10 000 ppm (1%) is achieved as determined by a suitable test kit]

COOLING WATER IN CANNERIES Solutions of this product containing 1% available chlorine will sanitize cooling water protect canned goods from contamination and spoilage and prevent staining of cans The solution should be fed into cooling tanks or channels to reach a concentration of 2 ppm available chlorine Check every two or three hours to be sure that an available chlorine residual of 2 ppm is maintained throughout the cooling system To make a 1% solution use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 10 000 ppm (1%) is achieved as determined by a suitable test kit

POULTRY DRINKING WATER Spray or flush with a chlorinated solution using a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 5 000 ppm (0.5%) is achieved] Treat poultry drinking water to a dosage of 1 to 5 ppm available chlorine Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 1 to 5 is achieved as determined by a suitable test kit]

FISH FILLETING Eviscerated and degilled fish removed from the fishing vessel are placed in a wash tank of seawater or fresh water which has been treated with enough product to produce a chlorine residual of 25 ppm as determined by a test kit Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 25 ppm is achieved as determined by a suitable test kit] Remove fish from treated water 24 to 48 hours before filleting After scaling the fish are again washed in a 25 ppm solution and are ready for filleting

PECAN CRACKING AND DYEING Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 1000 ppm is achieved as determined by a suitable test kit Soak for a minimum of 10 minutes After removal age pecans for 24 hours Before bleaching pecans are placed in a rotary cleaner where they are washed drained and soaked in a 2% sulphuric acid bath at 80 to 90 F for 1 minute Transfer to a 5000 ppm solution Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 5000 ppm is achieved as determined by a suitable test kit After 4 to 8 minutes they are drained and washed in a 1% sulphuric acid bath at 80 to 90 F They are then dried