

1258-808

8/27/2012

1/21



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

AUG 27 2012

Leigh Ann Richardson
Regulatory Supervisor
Arch Chemicals Inc
5660 New Northside Drive Suite 1100
Atlanta GA 30328

Subject HTH Duration Tablets
EPA Registration Number 1258 808
Application Date July 27 2012
EPA Receipt Date August 1 2012

Dear Ms Richardson

This acknowledges receipt of the above notification application submitted under the provision of PR Notice 98 10 FIFRA 3(c)9

Proposed Notifications

Label notification for addition of marketing claims and other changes Refer to Arch Chemicals Inc letter dated July 27 2012

General Comments

Based on a review of the material submitted the following comment applies

The notification application is acceptable A copy of the accepted notification has been inserted in your file for future reference

Should you have any questions or comments concerning this letter please contact Adam Heyward via email at heyward_adam@epa.gov or by telephone at (703) 347 0274 during the hours of 6 00 am to 2 30 pm EST

Sincerely

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

EPA	United States Environmental Protection Agency Washington DC 20460	<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 808	2 EPA Product Manager Monesha Harris	3 Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4 Company/Product (Name) HTH Duration Tablets	PM# 32	
5 Name and Address of Applicant (Include ZIP Code) Arch Chemicals Inc – Arch is now owned by Lonza 5660 New Northside Dr NW Suite 1100 Atlanta GA 30328		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
<input type="checkbox"/> Check if this is a new address		

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 for the addition of marketing claims and other minor label changes Refer to 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 Leigh Ann Richardson Date 7/27/12

Section – III

1 Material This Product Will Be Packaged In				2 Type of Container	
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		Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify)
	If Yes Unit Packaging wgt	No per container	If Yes Package wgt	No per container	
3 Location of Net Contents Information <input checked="" 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 Leigh Ann Richardson	Title Regulatory Supervisor	Telephone No (include Area Code) 678 627 2126
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>Leigh Ann Richardson</u>	3 Title Regulatory Supervisor	
4 Typed Name Leigh Ann Richardson	5 Date <u>7/27/12</u>	

3/21



Via Fed Ex

Ms Monisha Harris PM 32
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U S Environmental Protection Agency
Room S 4900 One Potomac Yard
2777 South Crystal Drive
Arlington VA 22202 4501

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

Leigh Ann Richardson
Lonza Microbial Control
Regulatory Services

Tel 678 627 2126
Fax 678 627 2081
LeighAnn.Richardson@Lonza.com

July 27 2012

**SUBJECT HTH Duration Tablets EPA Reg No 1258 808
Application for Label Notification**

Dear Ms Harris

I am submitting an application to make the following changes to the above named product label

- 1 Change the format from landscape to portrait orientation
- 2 Add Note to reviewer to the top of page 1
- 3 Add the Spanish translation to DANGER (PELIGRO) as optional for the front panel
- 4 Add [left] [right] to the locations of the precautionary statements and First Aid section
- 5 Add a hyphen in the words well ventilated in two places on page 2
- 6 On page 2 combine the two separate Environmental Hazards sections to match other Arch Chemicals Inc labels
- 7 Combine all optional marketing claims in one location that were previously on various pages They are now on pages 4 5
- 8 We would also like to add the following optional marketing statements and graphics of a towel and flip flops which are on page 4 of the enclosed proposed label

{The [Brand or POOLIFE] 3 Step System below may be placed on the label to allow easy product identification by consumers }

[[Brand or POOLIFE] 3 Step System]

[Step] [1] [Sanitize [It!]] [POOLIFE Exclusive Pool Care Collection MPT Extra]

[Step] [2] [Shock [It!]] [POOLIFE Exclusive Pool Care Collection TurboShock Shock Treatment]

[Step] [3] [Defend [It!]] [POOLIFE Exclusive Pool Care Collection Defend +]

- 9 Move the heading DIRECTIONS FOR USE and the two sentences following it to the top of page 6 so they are now before all the use directions
- 10 On page 6 relocated optional marketing language from before DIRECTIONS FOR USE to be within the Swimming Pool use section
- 11 On page 7 move the statement that begins with Additional shocking to the Shock Treatment/Superchlorination paragraph It was previously located before DIRECTIONS FOR USE

4/21

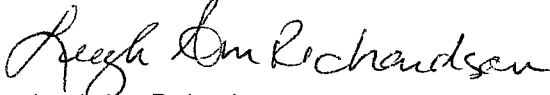
2/2 July 27 2012 HTH Duration Tablets EPA Reg No 1258 808 Label Notification

Please find enclosed the following documents in support of this notification

- Application for Pesticide (8570 1)
- Certification with Respect to Label Integrity
- 1 copy of the proposed label with changes highlighted
- 1 CD with proposed label

If you have any questions or need any additional information please feel free to contact me at 678 627 2126

Sincerely
Arch Chemicals, Inc



Leigh Ann Richardson
Regulatory Supervisor

Note to reviewer

[All text in brackets [AAA] is optional and may/may not be included on final label]

{All text in braces {AAA} is for information purposes and will not appear on final label}

HTH Duration Tablets

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

MINIMUM AVAILABLE CHLORINE 65%

KEEP OUT OF REACH OF CHILDREN

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] 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] {The following optional statement is for use on residential use swimming pool and spa products} **[Do not mix this product with a small amount of water Only add directly to your pool] Highly corrosive Causes skin and eye damage May be fatal if swallowed**

Read all precautionary statements and first aid statements on [left] [right] [back] [side] panel before use

EPA REG NO 1258 808
 EPA EST NO XXXXX YY ZZ
 NET WT XXXXX

ARCH CHEMICALS INC
 P O BOX 724438
 ATLANTA GA 31139 1438

NOTIFICATION
 Date Reviewed
 Reviewed By *Anthony*

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

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

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 heat and from flame and 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 products in containers \geq 5 gallons (liquid) or \geq 50 pounds (solid dry weight) or all container sizes of products registered for industrial/commercial/institutional water treatment or processing uses include 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

{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]

[[On ICM products only – EPA Label Manual chap 13 p 5] 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

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

IMPORTANT DO NOT USE THIS PRODUCT IN ANY FEEDER FLOATER SKIMMER OR OTHER CHLORINATING DEVICE IN WHICH ANY OTHER CHLORINATING COMPOUND HAS BEEN USED

DO NOT use this product with any other chlorinating compound

DO NOT place in skimmer baskets that contain undissolved material from previously used tablets or sticks

DO NOT use this product in any chlorinating device which has previously contained other [pool] chemicals

{OPTIONAL MARKETING CLAIMS Statements available to all labels}

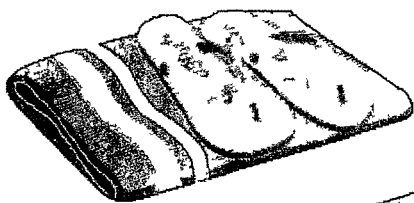
- [68% available chlorine]
- [Slow dissolving]
- [Chlorinates up to 1 week]
- [Chlorine lasts up to 1 week]
- [Each capsule lasts for days]
- [Long lasting capsule]
- [Individually wrapped for easy handling]
- [No need to touch the chlorine]
- [Convenient]
- [Easy to use]
- [Kills bacteria destroys organic contaminants and controls algae]
- [Kills bacteria]
- [Controls algae]
- [Destroys organic contaminants]
- [Eliminates bacteria]
- [Destroys Bacteria]
- [Innovative exclusive patented technology]
- [For routine use in skimmers]
- [Designed for skimmer use]
- [For routine use in floaters]
- [For routine use in feeders]
- [Will not cause over stabilization]
- [Contains no cyanuric acid]
- [Sanitizes pool water]
- [Swimming pool sanitizer]
- [Step 1]

{Optional statements for Dealer Retail Brands}

- [Step 1 Sanitize
- Step 2 Shock
- Step 3 Add Algaecide]

{The [Brand or POOLIFE] 3 Step System below may be placed on the label to allow easy product identification by consumers }

- [[Brand or POOLIFE] 3 Step System]
- [Step] [1] [Sanitize [It]] [POOLIFE Exclusive Pool Care Collection MPT Extra][POOLIFE Exclusive Pool Care Collection Brite Stix] [POOLIFE Exclusive Pool Care Collection Active Cleaning Caplets Chlorinator]
- [Step] [2] [Shock [It]] [POOLIFE Exclusive Pool Care Collection TurboShock Shock Treatment]
- [Step] [3] [Defend [It]] [POOLIFE Exclusive Pool Care Collection Defend +]





{Optional} []



{Optional} []

**[[HTH] [HTH POOLIFE] (Brand Name) HELPLINE
[866 HTH POOL] [866 4 POOL FUN]**

Toll Free

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)]

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

[PATENT NO 4 876 003]

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

[WHY YOU SHOULD USE THIS PRODUCT [brand] [Capsules] [cubes] [caplets] [tablets] is a multi purpose product that is easy and convenient to use This product controls algae kills bacteria and destroys organic contaminants These 10 5 ounce [caplets] [capsules] [caplets] [tablets] are designed to be used in the skimmer basket and dissolve slowly providing a steady source of available chlorine for complete swimming enjoyment in your pool [For [crystal] [clear] [clean] pool water follow our 4 step pool care program Step 1 Test and adjust pool water balance Step 2 Chlorinate and clarify Step 3 Shock treat your pool at least once a week and Step 4 Add algaecide regularly [where needed]]

[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 analysis]

[HOW TO USE Do not allow this product to contact other water treatment products 1 Use only in pools with a skimmer and skimmer basket 2 Skimmer basket should be free of all other water treatment products before adding recommended amount of this product 3 Do not remove plastic sleeve from the [capsule] [caplet] [capsule] [cube] [tablets] 4 Place [capsule(s)] [caplet(s)] [cube(s)] [tablet(s)] in the empty skimmer basket 5 Remove empty plastic sleeve(s) when [capsule(s)] [caplet(s)] [cube(s)] [tablet(s)] are dissolved 6 Replace with a new capsule(s) as needed **Do not mix with other products or dissolve before use [Do not pre mix this product Only add this product directly to your pool]**

WATER BALANCE For optimum product performance swimmer comfort and crystal clear water always maintain pH from 7 2 to 7 6 total alkalinity from 60 to 120 {retail brands only} {Commercial brands for very large commercial or municipal pools will use [60 to 100]} parts per million (ppm) and calcium hardness above 200 ppm Test frequently using a reliable test kit that measures all of the above ranges Use [brand] Pool Care Products to make adjustments Follow label directions for each product

Do not enter pool until the free available chlorine residual is 1 4 ppm for each of the below noted water treatment applications {For Industrial/Municipal pool labels } [Reenter pool when residual is 1 4 ppm or when chlorine residual meets local public health guidelines]

OPENING YOUR POOL For best results see Water Balance section above before treatment Adjust and maintain pH in the 7 2 to 7 6 range Follow Shock Treatment directions on this package Test free available chlorine residual with a pool test kit Repeat treatment as needed

[ROUTINE CHLORINATION For best results see Water Balance section above before treatment Throughout the pool season adjust pH to 7 2 7 6

FOR UNSTABILIZED POOLS Begin by using 3 [capsule(s)] [caplet(s)] [cube(s)] [tablet(s)] of this product per 10 000 gallons of pool water

FOR POOLS STABILIZED USING [brand] Begin by using 1 capsule of this product per 10 000 gallons of pool water

FOR UNSTABILIZED AND STABILIZED POOLS After one day use a suitable test kit to check free available chlorine residual Increase or decrease the number of [capsule(s)] [caplet(s)] [cube(s)] [tablet(s)] to maintain a free available chlorine residual of 1 4 ppm Follow HOW TO USE directions on this label]

[SHOCK TREATMENT/ SUPERCHLORINATION For best results see Water Balance section above before treatment Adjust pH to 7 2 to 7 6 [with [brand]] Follow label directions Shock treat using [a chlorine shock product or [brand]] Follow label directions on that product Do not reenter pool until the free available chlorine residual is 1 to 4 ppm Shock treat your pool when opening then weekly to prevent pool problems In the summer months when the pool water temperature is 80° F or above or if the chlorine residual falls rapidly after regular chlorination superchlorination is recommended Use a chlorine shock product and follow the directions on that product for superchlorination]

[Additional shocking to keep water clean and clear is recommended after rain and heavy winds high number of swimmers increased water temperature increased frequency of pool usage]

[WINTERIZING For best results see Water Balance section above before treatment Follow Shock Treatment Directions Above and add per winterizing directions on the chlorine shock product]

[FOR FLOATER/FEEDER USE

Use only in a new floater/feeder that has previously contained only this product Place the required number of [capsule(s)] [caplet(s)] [cube(s)] [tablet(s)] horizontally in the chamber If floater/feeder is equipped with adjustable chamber set the openings to allow maximum water flow past the capsule Test water and adjust to maintain 1.4 ppm free available Chlorine residual When the [capsule(s)] [caplet(s)] [cube(s)] [tablet(s)] are completely dissolved (remove plastic sleeve) replace with new capsule as needed]

[TO DETERMINE YOUR POOL CAPACITY IN U S GALLONS USE THE APPROPRIATE FORMULA BELOW

POOL SHAPE FORMULA (Use measurements in feet only)

RECTANGULAR Length x Width x Average Depth x 7.5=Total Gallons

ROUND Diameter x Diameter x Average Depth x 5.9=Total Gallons

OVAL Maximum Length x Maximum Width x Average Depth x 5.9 = Total Gallons

FREE FORM Surface Area (Sq Feet) x Average Depth x 7.5 = Total Gallons]

{ICM Dosage Table}

Available Chlorine ppm		Number of Tablets	Volume in Gallons
Nominal	Actual		
1	1.0	1	50,000
5	5.1	1	10,000
10	10.3	1	5,000
25	25.7	1	2,000
50	51.4	1	1,000
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]

{Use2} [HUBBARD AND IMMERSION TANKS Using 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 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]

{Use3} [HYDROTHERAPY TANKS – Using 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 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 pump 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 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

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 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 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 Preclean 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 using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved 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 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 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 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 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 Preclean all surfaces after use Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved 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 dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved]

{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 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 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 Preclean all surfaces after use Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved 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 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 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 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 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 solution Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 600 ppm is achieved 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 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 or 1000 ppm is achieved 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

FILTER BEDS SLIME CONTROL Remove filter from service drain to a depth of 1 ft above filter sand and add 16 oz [or 1 tablets] 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. 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 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 1000 ppm is achieved. 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. 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. 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 16 oz [or 1 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. Using a suitable chemical feed dispenser dissolve and dose the chlorinated solution until a concentration of 50 ppm is achieved. 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 and 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. 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. 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. Allow to stand for 2 to 4 hours, flush, and return to service.

FILTERS When the sand filter needs replacement, apply 16 oz. [or 1 tablet] 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 16 oz. [or 1 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. [or 1 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 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 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 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 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 and 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 and dissolve and dose the chlorinated solution until a concentration of 5 to 10 ppm is achieved [Subsequent Dose Maintain this treatment level by using a suitable chemical feed dispenser and dissolve and dose the chlorinated solution until a concentration 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 and dissolve and dose the chlorinated solution until a concentration of 5 ppm is achieved Badly fouled systems must be cleaned before treatment is begun

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 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 and dissolve and dose the chlorinated solution until a concentration of 200 ppm is achieved. 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. 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. 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. 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. 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. 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. 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 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.

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 the 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
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 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 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

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 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 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 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 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 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 the 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 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 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 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. Porous equipment should soak for one hour.

MAINE LOBSTER PONDS 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. 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 Using a suitable chemical feed dispenser, dissolve and dose the chlorinated solution until a concentration of 0.5 ppm is achieved. 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. 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. 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 prepared by 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 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 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

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

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

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 is achieved 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 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 5000 ppm solution Use a suitable chemical feed dispenser to dissolve and dose the chlorinated solution until a concentration of 5000 ppm is achieved 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]