19369-4 4/21/2011 1of6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

APR 21 2011

Debra J. Coffman
Acco Unlimited Corporation
5300 NW 55th Avenue
Johnston, IA. 50131

Notification Dated March 24, 2011
Product Name: Acco Liquid Chlorinating Concentrate Solution-L
EPA Registration Number: 19369-4

Dear Ms. Coffman:

This acknowledges receipt of your Notification submitted in accordance with the provisions of PR Notice 98-10 under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) section 3(c)9 and received by the Agency on April 1, 2011.

Proposed Notification

- Removal of 7 gallon contents size from label.

General Comments

Based on a review of the material submitted, the notification is acceptable.

We have noted the submission of your final printed label based on the conditions of October 25, 2010. If you have any questions concerning this letter, please contact Tom Luminello by telephone, (703) 308-8075, or by e-mail at luminello.tom@epa.gov.

Sincerely,

Tom Luminello

for Wanda Y. Henson
Acting Product Manager 32
Regulatory Management Branch II
Antimicrobials Division (7510-P)

Please read instructions on reverse before completing form. Form Approved, OMB No. 2070-0060 Print Form

EPA

United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
19369-4	Emily Mitchell	☐ None ☐ Restricted
4. Company/Product (Name) ACCO Liquid Chlorinating Concentrate Solution-L	**PM#** 32	

5. Name and Address of Applicant *(Include ZIP Code)*

ACCO Unlimited Corporation
5300 NW 55th Avenue
Johnston IA 50131

☐ *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

☐ Amendment - Explain below.
☐ Resubmission in response to Agency letter dated _____
☒ Notification - Explain below.
☐ Final printed labels in response to Agency letter dated _____
☐ "Me Too" Application.
☐ Other - Explain below.

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

Smallest packaging size 15 gallon container. Child resistant packaging requirements no longer apply. Changes made per letter dated October 25, 2010. Copy enclosed.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes* ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Metal ☐ Plastic ☐ Glass ☐ Paper ☐ Other (Specify) _____
* *Certification must be submitted*	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☐ Label ☐ Container		☐ On Label ☐ On Labeling accompanying product

6. Manner in Which Label is Affixed to Product ☐ Lithograph ☐ Paper glued ☐ Stenciled ☐ Other _____

Section - IV

1. Contact Point *(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)*

Name	Title	Telephone No. (Include Area Code)
Jessica Pollard	Comptroller's Assistant	(515) 278-0487

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	3. Title	5. Date
Debra J. Coffman	General Manager	March 24, 2011

4. Typed Name Debra J. Coffman

ACCO LIQUID CHLORINATING CONCENTRATE SOLUTION-L

A SODIUM HYPOCHLORITE SOLUTION FOR SANITIZATION IN THE WATER TREATMENT INDUSTRIES AND ALGAE CONTROL IN SWIMMING POOLS, WATER TREATMENT, PUBLIC WATER SUPPLIES, AND WASTE WATER SYSTEMS.

ACTIVE INGREDIENT: Sodium Hypochlorite	12.5%
OTHER INGREDIENTS:	87.5%
	100%

UN1791, Hypochlorite Solution, 8, Corrosive Material, PG III

KEEP OUT OF REACH OF CHILDREN

DANGER

FIRST AID STATEMENT

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 poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call poison control center or doctor for further treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for further treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by 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 ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

HOT LINE NUMBER: Have the product container or label with you when calling a poison center or doctor, or going for treatment. Contact 1-800-222-1222 for emergency medical treatment information.

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

Transport upright, never in passenger area. Protect rugs or upholstery.
(See Side Panel for Additional Precautionary Statements)

CONTENTS: ☐ BULK ___ GAL. ☐ 55 GAL. ☐ 15 GAL.

DIRECTIONS FOR USE:

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING

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

STORAGE AND DISPOSAL: Do not contaminate food or feed by storage, disposal, or cleaning of equipment.

ACCO LIQUID CHLORINATING CONCENTRATE SOLUTION-L STORAGE: Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer, in accordance with state & local regulations.

ACCO LIQUID CHLORINATING CONCENTRATE SOLUTION-L DISPOSAL: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

CONTAINER HANDLING:

REFILLABLE CONTAINER - Refill this container with ACCO Liquid Chlorinating Concentrate Solution-L only. Do not reuse this container for any other purpose. Clean container promptly after emptying. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container: fill container 1/4 full with water. Replace the closure or plug the opening of the container. Rotate the container, making sure to rinse all surfaces. Turn the container upside down. Add the rinsate to the application equipment or mix tank or store rinsate for later use or disposal. Allow 30 seconds for rinsate to drain. Repeat this procedure two more times. Offer container for recycling if available or dispose of in a sanitary landfill, or by other procedure allowed by state & local authorities.

SWIMMING POOL WATER DISINFECTION: For a new pool or spring start-up, superchlorinate to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Adjust and maintain pool water pH to between 7.2 and 7.6. Adjust and maintain the alkalinity of the pool to between 50 to 100 ppm. (See Table of Proportions.) To maintain the pool, add manually or by a feeder device to yield an available chlorine residual between 0.6 to 1.0 ppm by weight. Stabilized pools should maintain a residual of 1.0 to 1.5 ppm available chlorine. Test the pH, available chlorine residual, and alkalinity of the water frequently with appropriate test kits. Frequency of water treatment will depend upon temperature and number of swimmers. (See Table of Proportions.) Every 7 days, or as necessary, superchlorinate the pool to yield 5 to 10 ppm available chlorine by weight. Check the level of available chlorine with a test kit. Do not re-enter pool until the chlorine residual is between 1.0 to 4.0 ppm. (See Table of Proportions.) Re-entry into treated pools is prohibited above levels of 4 ppm due to risk of bodily harm. At the end of the swimming pool season or when water is to be drained from the pool, chlorine must be allowed to dissipate from treated pool water before discharge. Do not chlorinate the pool within 24 hours prior to discharge.

WINTERIZING POOLS: While water is still clear & clean, obtain while filter is running a 3 ppm available chlorine residual, as determined by a suitable test kit. Cover pool, prepare heater, filter, and heater components for winter by following manufacturer's instructions. See Table of Proportions.

SPAS/HOT-TUBS: See Table of Proportions 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 7.8. Some oils, lotions, fragrances, cleaners, etc., may cause foaming or cloudy water as well as the efficiency of the product. To maintain the water, see Table of Proportions to maintain a chlorine concentration of 5 ppm. After each use, see Table of Proportions and apply product to raise to 16 ppm available chlorine to control odor and algae. Do not enter spa or tub until chlorine concentration is back to 5 ppm. Re-entry into treated pools is prohibited above levels of 5 ppm due to risk of bodily harm. During extended periods of disuse, see Table of Proportions and add product to maintain a 3 ppm chlorine concentration.

DISINFECTION OF DRINKING WATER -PUBLIC SYSTEMS: See Table of Proportions. Prepare a 10 ppm solution. 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.

DISINFECTION OF DRINKING WATER (EMERGENCY DISINFECTION): When boiling 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. Then add this product to make a 0.6 ppm solution. (See Table of Proportions.) 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.

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SPAS/HOT-TUBS: See Table of Proportions 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 7.8. Some oils, lotions, fragrances, cleaners, etc., may cause foaming or cloudy water as well as the efficiency of the product. To maintain the water, see Table of Proportions to maintain a chlorine concentration of 5 ppm. After each use, see Table of Proportions and apply product to raise to 16 ppm available chlorine to control odor and algae. Do not enter spa or tub until chlorine concentration is back to 5 ppm. Re-entry into treated pools is prohibited above levels of 5 ppm due to risk of bodily harm. During extended periods of disuse, see Table of Proportions and add product to maintain a 3 ppm chlorine concentration.

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PUBLIC WATER SYSTEMS: See Instruction Sheet.
SEWAGE & WASTEWATER EFFLUENT TREATMENT: See Instruction Sheet.
SEWAGE & WASTEWATER TREATMENT: See Instruction Sheet.
LAUNDRY SANITIZERS: See Instruction Sheet.
SANITIZATION OF NONPOROUS FOOD CONTACT SURFACES: See Instruction Sheet.

TABLE OF PROPORTIONS - ACCO Liquid Chlorinating Concentrate Solution-L

.2 - .6 ppm	-	1 fluid ounce per 2,000 gallons water
5 ppm	-	6 fluid ounces per 1,000 gallons water
10 ppm	-	29 fluid ounces per 2,500 gallons water
16 ppm	-	18 fluid ounces per 1,000 gallons water
50 ppm	-	58 fluid ounces per 1,000 gallons water
100 ppm	-	1 fluid ounce per 10 gallons water
200 ppm	-	1 fluid ounce per 5 gallons water
500 ppm	-	6 fluid ounces per 10 gallons water
600 ppm	-	4 fluid ounces per 5 gallons water
1,000 ppm	-	6 fluid ounces per 5 gallons water

Do not apply this product through any type of irrigation system.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER:

CORROSIVE:
May cause severe skin and eye irritation or chemical burns to broken skin. Causes eye damage. Wear safety glasses or goggles and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

PHYSICAL OR CHEMICAL HAZARDS: STRONG OXIDIZING AGENT:
Mix only with water according to label directions. Mixing this product with chemicals (e.g. ammonia, acids, detergents, etc.) or organic matter (e.g. urine, feces, etc.) will release chlorine gas which is irritating to eyes, lungs, and mucous membranes.

ENVIRONMENTAL HAZARDS:
This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other 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.

EPA REG. NO. : 19369-4
EPA EST. NO. : 19369-IA-001

NSF 60

STATE AND LOCAL REGULATIONS: Consult your dealer, state, or local health authorities for additional information.

ACCO Unlimited Corporation makes no warranty, expressed or implied, concerning this material, except that it conforms to the chemical description on this label. Neither ACCO Unlimited Corporation nor seller shall be held responsible in any manner for personal injury or property damage, or other type of loss resulting from handling, storage or use of this material. The buyer assumes all risk and liability therefrom and accepts and uses this material on these conditions.

MANUFACTURED BY: ACCO Unlimited Corporation
5300 NW 55th Avenue
Johnston, IA 50131
515-278-0487

jp3/11

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INSTRUCTION SHEET

LAUNDRY SANITIZERS

Household Laundry Sanitizers: IN SOAKING SUDS: See Table of Proportions and provide 200 ppm available chlorine solution. Wait 5 minutes, then add soap or detergent. Immerse laundry for at least 11 minutes prior starting the wash/rinse cycle. IN WASHING SUDS: See Table of Proportions and add sufficient product to wash water containing clothes to provide 200 ppm available chlorine. 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. Thoroughly mix sufficient proportion of this product with 10 gallons of water to yield 200 ppm available chlorine. (See Table of Proportions.) Promptly after mixing the sanitizer, add the solution into the pre-wash 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.

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 ensure that the available chlorine does not drop below 50 ppm. See Table of Proportions and prepare a 100 ppm solution. If no test kit is available, see Table of Proportions and prepare a sanitizing solution to provide approximately 200 ppm available chlorine by weight.

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 the suitable test kit, either discard the solution or add sufficient product to re-establish 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 re-used for sanitizing purposes.

Immersion Method: A solution of 100 ppm available chlorine (See Table of Proportions) may be used in the sanitizing solution if a chlorine test kit is available. (See Table of Proportions.) Solutions containing an initial concentration of 100 ppm available chlorine must be tested and adjusted periodically to ensure the available chlorine does not drop below 50 ppm. See Table of Proportions and prepare a 100 ppm sanitizing solution. If no test kit is available, see Table of Proportions and prepare 200 ppm available chlorine by weight.

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 re-establish 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 re-used 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. (See Table of Proportions.) 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 ensure 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. See Table of Proportions to prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment. 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 ensure 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.

Spray/Fog 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. Use spray or fogging equipment which can resist hypochlorite solutions. Always empty and rinse spray/fog equipment with potable water after use. Thoroughly spray or fog 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. (See Table of Proportions.)

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.

Main: 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. Use a 500 ppm available chlorine solution. (See Table of Proportions.) Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable water and return to service.

New Filter Sand: Apply 80 oz. of this product for each 150 to 200 cubic feet of sand. The action of the product dissolving as the water passes through the bed will aid in sanitizing the new sand.

New Wells: Flush the casing with a 50 ppm available chlorine solution of water. (See Table of Proportions.) 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
by using a solution of approxima
let stand at least 4 hours. Drain and
containing approximately 1,000 pp

SEWAGE

The disinfection of sewage efflu
coliform bacteria, as determined b
reduced to or below the maximum

On the average, satisfactory disi
ppm after 15 minutes contact. Al
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The following are critical factors

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Effluent Slime Cont
complete mixing. Once contro

Filter Beds Slime C
product to obtain 500 ppm even
a level that is even with the top

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/Pressure Method: Disassemble equipment and thoroughly clean after use. Assemble equipment in ıg position prior to use. Prepare a volume of a 200 ppm available chlorine sanitizing solution equal to 110% of capacity of the equipment. (See Table of Proportions.) Pump solution through the system until full flow is obtained :tremities, the system is completely filled with the sanitizer, and all air is removed from the system. Close drain ınd hold under pressure for at least 2 minutes to ensure contact with all internal surfaces. Remove some cleaning from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process if effluent contains less ppm available chlorine.

n-In-Place Method: Thoroughly clean equipment after use. See Table of Proportions to prepare a of a 200 ppm available chlorine sanitizing solution equal to 110% of volume capacity of the equipment. Pump through the system until full flow is obtained at all extremities, the system is completely filled with the sanitizer, and emoved from the system. Close drain valves and hold under pressure for at least 10 minutes to ensure contact with all internal ;. Remove some cleaning solution from drain valve and test with a chlorine test kit. Repeat entire cleaning/sanitizing process .t contains less than 50 ppm available chlorine.

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PUBLIC WATER SYSTEMS

ırvoirs - Algae Control: Hypochlorinate streams feeding the reservoir. Suitable feeding points should :ted on each stream at least 50 yards upstream from the points of entry into the reservoir.

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

Tanks, Basins, Etc.: Remove all physical soil from surfaces. Use a 500 ppm available chlorine solution. ıble of Proportions.) Fill to working capacity and allow to stand for at least 4 hours. Drain and flush with potable ıd return to service.

Filter Sand: Apply 80 oz. of this product for each 150 to 200 cubic feet of sand. The action of the product ng as the water passes through the bed will aid in sanitizing the new sand.

Wells: Flush the casing with a 50 ppm available chlorine solution of water. (See Table of Proportions.) The ı should be pumped or fed by gravity into the well after thorough mixing with agitation. The well should stand for hours or overnight under chlorination. It may then be pumped until a representative raw water sample is obtained. al examination of the water will indicate whether further treatment is necessary.

Existing Equipment: Remove equipment from service, thoroughly clean surfaces of all physical soil. Sanitize by using a solution of approximately 500 ppm available chlorine. (See Table of Proportions.) Fill to working capacity and let stand at least 4 hours. Drain and place in service. If the previous treatment is not practical, surfaces may be sprayed with a solution containing approximately 1,000 ppm available chlorine. After drying, flush with water and return to service.

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, to ensure that the chlorinated effluent has been reduced to or below the maximum permitted by the controlling regulatory jurisdiction.

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

The following are critical factors affecting wastewater disinfection:

1. Mixing: It is imperative that the product and the wastewater be instantaneously and completely flash mixed to assure reaction with every chemically active soluble and particulate component of the wastewater.
2. Contacting: Upon flash mixing, the flow through the system must be maintained.
3. Dosage/Residual Control: Successful disinfection is extremely dependent on response to fluctuating chlorine demand to maintain a predetermined, desirable chlorine level. Secondary effluent should contain 0.2 to 1.0 ppm chlorine residual after a 15 to 30 minute contact time. A reasonable average of residual chlorine is 0.5 ppm after 15 minutes contact time.

SEWAGE AND WASTEWATER TREATMENT

Effluent Slime Control: Apply a 100 to 1000 ppm available chlorine solution at a location which will allow complete mixing. Once control is evident, apply a 15 ppm available chlorine solution. (See Table of Proportions.)

Filter Beds Slime Control: Remove filter from service. Drain to a depth of 1 ft. above filter sand, and add product to obtain 500 ppm evenly over the surface. (See Table of Proportions.) Wait 30 minutes before draining to a level that is even with the top of the filter. Wait for 4 to 6 hours before completely draining and backwashing.

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