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Attn. Rena Bryant  
Secretary to the Board of Health  
125 Worth Street, CN-31  
New York, New York 10013

April 27, 2009

Dear Rena Bryant,

My name is Michael Cochran, and I work for CDG Environmental, LLC. CDG Environmental, with offices in Bethlehem, Pa. sells highly engineered chlorine dioxide chemistries for municipal drinking water treatment, commercial and industrial water treatment and disinfection of domestic water in hospitals and hotels.

It is our understanding, that on March 24 2009, the Board of Health voted to authorize for publication and public comment a proposal for the repeal and reenactment of Article 141 of the New York City Health Code, concerning the City's water supply safety standards. We also understand that The Department will hold a public hearing on this proposal on May 1, 2009.

CDG Environmental, LLC provides chemicals and expertise needed to treat and purify potable water. Our chemical, CDG Solution 3000 is EPA registered to treat potable water in all 50 states, and is NSF 60 approved. CDG sells not only chlorine dioxide generators and equipment used by municipalities across America, but now also offers a very dilute, but extremely pure solution of chlorine dioxide in totes, drums and pails. For the first time ever, customers can now purchase chlorine dioxide in liquid form, obviating the need to install expensive generators. With simple feed pumps and monitors, building personnel can accurately and easily treat potable water with this highly efficacious biocide. CDG Environmental pioneered this new technology, called CDG Solution 3000, and is the only company offering pure, dilute, ready to use chlorine dioxide from a container. We have also designed the feed systems that work well with our CDG Solution 3000.

I would like to add that your current limitation of 10 gallons of chemical storage should not apply to our product, since the amount of chemical we use (chlorine dioxide) is a very small quantity diluted to a large quantity of pure water (our product is 99.7% water). This is done precisely for safe handling, containment, transport and storage. We would like to see the rulemaking accommodate such a supply system.

As such, we would like to request approval by the NY DOH to use our chemical and prescribed dosing equipment for the treatment of potable and non potable water in NYC's public buildings, such as hospitals, nursing homes, commercial and residential office buildings, etc.

Attached with this letter is our EPA approval letter and MSDS sheet. We look forward to working with New York City's DOH.

Regards,

A handwritten signature in black ink that reads "Michael S. Cochran".

Michael S. Cochran  
Sales Manager  
Sent via e-mail and fax to  
[Resolutioncomments@health.nyc.gov](mailto:Resolutioncomments@health.nyc.gov)  
fax (212) 788-4315

205 Webster Street, Bethlehem, PA 18015  
Phone: 484-821-0780; Toll-free: 888-610-2562; Fax: 484-821-0802

**CDG Solution 3000™**  
AN AQUEOUS SOLUTION OF CHLORINE DIOXIDE

This product is intended for the purification of water which has previously been treated in accordance with the Safe Drinking Water Act (SDWA), such as that provided by municipal water treatment facilities. Intended applications include: Treatment of Potable Water and Cooling Water in Hospitals & Healthcare Facilities, Nursing Homes, Hotels, Commercial Office Buildings, Government Buildings, Residential Buildings, and Ships; Treatment of Industrial Process Water, Food Processing Water, and Livestock Drinking Water, and Control of Slime in Human and Animal Potable Water Systems, Process Water Systems, and Cooling Towers.

**ACTIVE INGREDIENTS**

Chlorine dioxide..... 0.30%

**INERT INGREDIENTS**..... 99.70%

**TOTAL**..... 100.00%

*CDG Solution 3000™* contains 3000 ppm (3000 mg/liter) chlorine dioxide  
(available chlorine 0.85 %)

**KEEP OUT OF REACH OF CHILDREN  
DANGER POISON!**



**FIRST AID**

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Remove contaminated clothing.</li> <li>• Rinse exposed skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor immediately for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance then give artificial respiration.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor immediately for treatment advice.</li> </ul>

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

**HOTLINE NUMBERS**

For chemical spill information call CHEMTREC: 1-800-424-9300  
For emergency medical information, call the National Pesticide Information Center at 1-800-858-7378.

EPA Reg. No. 75757-2

Net Contents \_\_\_\_\_

Patent Pending

Lot # \_\_\_\_\_

Date: \_\_\_\_\_

Expiry Date: \_\_\_\_\_

EPA Est. No. 75757-PA-1

CDG Environmental, LLC  
205 Webster Street  
Bethlehem, PA 18015

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Danger - Poison: Corrosive:** Causes irreversible eye injury and skin burns. Do not get in eyes or on clothing. Do not breathe vapor or mist. Wear coveralls worn over long sleeve shirt, long pants, socks, chemical resistant footwear, chemical-resistant gloves, goggles, face shield, or shielded safety glasses and a respirator with an organic vapor removing cartridge with a pre-filter approved for pesticides (MSHA / NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA / NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter. Fatal if swallowed, absorbed through skin, or inhaled.

Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the restroom. Remove and wash contaminated clothing before reuse.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Keep containers tightly closed when not in use. Store in original container in a dark, dry place away from extremes of heat or freezing conditions. Do not store with easily oxidizable materials, acids, bases, or combustible materials.

**This product is to be used as directed within 90 days of the manufacture date indicated on the front panel of this label.**

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of pesticide, prepared solutions, or rinseate is a violation of Federal law. If wastes can not be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of your nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent) then offer for recycling, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by local and State authorities, by burning. If burned, stay out of smoke.

### 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.

### DIRECTIONS FOR USE

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

*CDG Solution 3000* is a chlorine dioxide product designed to purify water which has previously been treated in accordance with the Safe Drinking Water Act (SDWA) including: potable water and cooling water in hospitals & healthcare facilities, nursing homes, hotels, commercial office buildings, government buildings, residential buildings, and ships; industrial process water; food processing water; livestock drinking water. *CDG Solution 3000* also is designed to control slime in potable water systems, process water systems, and cooling towers. Pathogenic organisms controlled include bacteria and viruses set forth in USEPA *Guide Standard Protocol for the Purification of Water* (1987), i.e., *Klebsiella terrigena*, Poliovirus and Rotavirus.

In preliminary laboratory tests, *CDG Solution 3000* also has been shown to inactivate pure cultures of *Legionella* bacteria. However, the ability of *CDG Solution 3000* to control the growth of, or inactivate *Legionella* bacteria in institutional drinking water systems, process water systems, cooling water systems, or other operating environments in which the water may be exposed to UV light, organic material, other microbial contamination and aeration, has not been documented. These preliminary findings also do not address the problem of long-term preventative maintenance of the drinking water systems, cooling water systems, process water systems and other systems for which application of this product is intended.

**Carefully read and follow the instructions for the *CDG Solution 3000* dosing equipment provided by the manufacturer or its authorized agent.**

## POTABLE WATER, COOLING WATER, AND PROCESS WATER SYSTEMS

*CDG Solution 3000* is intended for use in water systems which use as their source treated municipal water including:

- Hospitals
- Office buildings
- Animal facilities
- Nursing homes
- Hotels
- Food processing plants
- Schools & public buildings
- Residential buildings
- Beverage production facilities

**Minimum contact time for control of listed pathogenic organisms is 5 minutes.**

## TREATMENT OF POTABLE WATER FOR HUMAN CONSUMPTION

Add *CDG Solution 3000* to the water at a dose of up to 2.0 ppm (2.0 mg/L) chlorine dioxide (a dilution ratio 1:1500). Under US EPA regulations, drinking water intended for human consumption may not contain more than 0.8 ppm (0.8 mg/liter) residual chlorine dioxide nor more than 1.0 ppm (1.0 mg/liter) chlorite ion.

**Minimum contact time for control of listed pathogenic organisms is 5 minutes.**

## TREATMENT OF WATER FOR ANIMAL CONSUMPTION

(For use to treat water for human consumption, see specific directions.)

Add *CDG Solution 3000* to the water at dose of 5.0 ppm (5.0 mg/liter) chlorine dioxide (a dilution ratio of 1:600).

**Minimum contact time for control of listed pathogenic organisms is 5 minutes.**

## TREATMENT OF COOLING WATER SYSTEMS TO CONTROL SLIME

Add *CDG Solution 3000* to the water at a dose of 50 ppm (50 mg/liter) chlorine dioxide (a dilution ratio of 1:60), and circulate or let stand overnight. Drain and rinse with clean water before re-use. To prevent slime growth after initial treatment, add *CDG Solution 3000* to the water at a dose of 5.0 ppm (5.0 mg/liter) chlorine dioxide (a dilution ratio of 1:600).

**Minimum contact time for control of listed pathogenic organisms is 5 minutes.**

## TREATMENT OF PROCESS WATER SYSTEMS TO CONTROL SLIME

Add *CDG Solution 3000* to the water at a dose of 50 ppm (50 mg/liter) chlorine dioxide (a dilution ratio of 1:60), and circulate or let stand overnight. Drain and rinse with clean water before re-use. To prevent slime growth after initial treatment, add *CDG Solution 3000* to the water supply at a dose of 5.0 ppm (5.0 mg/liter) chlorine dioxide (a dilution ratio of 1:600).

**Minimum contact time for control of listed pathogenic organisms is 5 minutes.**

## CONDITIONS OF SALE AND WARRANTY

CDG Research Corporation ("CDG"), its Supplemental Distributors and the Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use.

TO THE EXTENT PERMITTED BY LAW, NEITHER CDG NOR ITS SUPPLEMENTAL DISTRIBUTORS MAKE ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR OF MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS.

CDG, its Supplemental Distributors, and the Seller offer this product, and the Buyer accepts it, subject to the foregoing Conditions of Sale and Warranty. No employee or agent of CDG, its Supplemental Distributor, or the Seller is authorized to vary or exceed the terms of this Warranty in any manner.

# Material Safety Data Sheet

**Material:** Chlorine Dioxide 0.3% Aqueous Solution  
**Company:** CDG Environmental, LLC  
**MSDS No.** CD-004  
**Date of Preparation:** May 28, 2008  
**Revision:** 004

## Section 1 – Chemical Product and Company Identification

**Chemical Name:** Chlorine Dioxide Aqueous Solution  
**General Class:** Class 8 - Corrosive Liquid<sup>1</sup>  
**Packing Group:** 3  
**General Purpose:** Biocide  
**Synonyms:** Chlorine Oxide Solution  
Chlorine Peroxide Solution  
Chlorine (IV) Oxide Solution  
Chloroperoxyl Solution  
**UN ID** 1760 Corrosive liquid NOS  
**Company Name & Address:** CDG Environmental, LLC  
205 Webster Street  
Bethlehem, PA 18015

<sup>1</sup> *CDG Solution 3000* is a "corrosive material" (Class 8), solely because it is corrosive to steel and aluminum. It is not highly corrosive to skin. It MUST be packaged and shipped in containers that will not react dangerously with or be degraded by the *CDG Solution 3000* (e.g., plastic).

## Section 2 – Composition / Information on Ingredients

### Hazardous component(s):

Chemical name	Chlorine Dioxide
Molecular formula	ClO <sub>2</sub>
Concentration	0.3% (3,000 ppm)

### Non-hazardous component(s):

Chemical name	Water
Molecular formula	H <sub>2</sub> O
Concentration	≥ 99.7% (≥ 997,000 ppm)

## Section 3 – Hazard Identification

### Potential Health Effects – General:

Chlorine dioxide gas is a mucous membrane and respiratory tract irritant.

Swallowing large amounts of this material may be harmful.

Respiration/protection should be worn if concentrations exceed applicable standards.

### Primary Route(s) of Exposure:

The primary routes of exposure to this material are ingestion; inhalation; and eye and skin contact

### Signs and Symptoms of Exposure

#### Ingestion

Signs and symptoms of exposure to this material through swallowing include stomach or intestinal upset (nausea, vomiting, diarrhea)

### **Inhalation**

Signs and symptoms of exposure to this material through inhalation of its vapors include coughing, sore throat, breathing difficulty

### **Eye and Skin contact**

Signs and symptoms of exposure to this material through skin contact include skin irritation and redness. Signs and symptoms of exposure to this material through eye contact include eye irritation, tearing and redness.

## **Section 4 – First Aid Measures**

### **Eyes**

If symptoms develop, move patient away from the source of exposure and into fresh air. Flush eyes gently with large amounts of water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

### **Skin**

First aid is not normally required. However, concentrated solutions of the material (> 1000 ppm) may be highly irritating, especially on prolonged contact. Remove contaminated clothing immediately. Immediately flush exposed skin with large amounts of water. Wash thoroughly with mild soap. Consult a physician if irritation or burning persists. Contaminated clothing must be laundered before re-use. Lower concentrations (<1000) ppm may cause some irritation with very-prolonged exposure.

### **Swallowing**

First aid is not normally required when small amounts of the material are ingested. If symptoms develop or if large amounts of material have been ingested, DO NOT induce vomiting. DO NOT give anything by mouth if the patient is unconscious. Drink large quantities of water. Consult a physician immediately. Neutralization and use of activated charcoal are not recommended.

### **Inhalation**

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen. Monitor

**Emergency Telephone Number:** 800-424-9300 24 hours, 7 days/week

the patient closely for delayed development of pulmonary edema, which may occur up to 72 hours after inhalation.

**Notes to Physicians**

No data

**Section 5 – Fire-Fighting Measures**

**NFPA Rating**

Health – 1  
Flammability – 0  
Reactivity – 1

**Flash Point**

Not applicable

**Auto-ignition Temperature**

Not applicable

**Explosive Limit**

Chlorine dioxide solution is not explosive. Chlorine dioxide gas, which may evolve from chlorine dioxide solution, may spontaneously decompose with a mild energy release at concentrations of 10% in air or greater at standard temperature and pressure (i.e., 76 mm Hg partial pressure).

Chlorine dioxide gas may explode with violent force at concentrations of 30% or greater in air at standard temperature and pressure (i.e., 228 mm Hg partial pressure)

**Hazardous Products of Combustion**

May form chlorine, hydrochloric acid gas, oxygen on combustion or decomposition

### **Fire and Explosion Hazards**

There are no special fire hazards known to be associated with the material.

### **Extinguishing Media**

Water

### **Fire Fighting Instructions**

Wear a self-contained breathing apparatus (SCBA) with a full face piece operated in the "positive pressure demand" setting. Use SCBA in conjunction with appropriate chemically resistant personal protective gear. Refer also to the personal protective equipment section of this MSDS.

## **Section 6 – Accidental Release Measures**

### **Large Spill**

In the event of a large spill of the material, prevent runoff to sewers, streams, lakes or other bodies of water. If run-off occurs, notify proper authorities of any runoff, as required, Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area around spill to prevent spreading, and pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, vermiculite, floor absorbent, or other absorbent material and shoveled into containers. Flush with water the area from which the bulk of the spill has been removed.

### **Small Spill**

Absorb liquid on vermiculite, floor absorbent or other absorbent material. Flush area with water.

## **Section 7 – Handling and Storage**

### **Handling**

In order to prevent the evolution of chlorine dioxide gas into the breathing zones of workers, agitation of the material should be minimized, and the material should not be stirred, mixed turbulently, sprayed or splashed.

### Storage

The material should be stored indoors, only in the containers in which it is shipped, or in containers authorized by the manufacturer for such storage. Storage temperatures should be maintained above 50°F and below 110°F. The material should not be stored outside or exposed to freezing temperatures (below 32°F). The material should not be heated to temperatures in excess of 140°F. At temperatures above 140°F, the gas concentration in the headspace of the container may reach high, energetically unstable concentrations.

## Section 8 – Exposure Controls / Personal Protection

The OSHA permissible exposure limit (PEL) for ClO<sub>2</sub> gas in air is 0.1 ppm (0.3 mg/m<sup>3</sup>) as an 8-hour time weighted average. NIOSH recommended exposure limits (REL) and ACGIH threshold limit values (TLV) are also 0.1 ppm.

NIOSH and ACGIH short-term exposure limits (STEL) are 0.3 ppm (0.83 mg/m<sup>3</sup>) for periods not to exceed 15 minutes. The STEL concentration should not be repeated more than 4 times per day and should be separated by intervals of at least 60 minutes.

### Exposure Guidelines (vapor)

OSHA PEL 0.100 ppm – TWA

ACGIH TLV 0.100 ppm – TWA

ACGIH TLV 0.300 ppm - STEL

### Eye Protection

Wear splash-proof face and eye protection (PVC is preferred) where chlorine dioxide solution may splash or spray. Safety glasses should be in compliance with OSHA regulations.

### Skin Protection

Wear waterproof protective clothing (PVC is preferred) where chlorine dioxide solution may splash or spray. Wear resistant gloves, such as Neoprene, to prevent skin contact, wear impervious clothing and boots. Other protective equipment: eyewash station, emergency shower.

### **Respiratory Protection**

Exposures in the workplace should be monitored to determine if worker exposure exceeds the facility-specified exposure "action level" or the use of the material produces adverse health effects or symptoms of exposure. Provide adequate ventilation to maintain all work areas at concentrations below 0.1 ppm chlorine dioxide concentration. If the generation of vapors or mists is possible, use local ventilation. Where gas concentration may exceed 0.1 ppm, only a NIOSH/MSHA approved full-face acid gas respirator should be used. Monitoring results must be used to assess the proper level of respiratory protection necessary. Proper engineering and/or administrative controls should be used to reduce worker exposure. The facility's respiratory protection program must meet the requirements established in 29 CFR 1910.134, which includes a program for medical evaluation. A NIOSH/MSHA approved self-contained breathing apparatus, with full face piece, is required for leaks and emergencies where the concentration may exceed 5 ppm.

### **Engineering Controls**

Provide sufficient mechanical ventilation-- general and/or local exhaust-- to maintain exposure below allowable limits.

## **Section 9 – Physical and Chemical Properties**

### **Appearance and odor**

Yellow-green liquid, with sharp, pungent odor

### **Liquid specific gravity**

1.0 at 0° C

### **Boiling Point**

100° C (212° F)

### **Odor threshold of gas**

0.1 ppm

## Section 10 – Stability and Reactivity

### Hazardous Polymerization

Material does not undergo hazardous polymerization.

### Hazardous Decomposition

Gas-phase vapors that evolve from the material may decompose on exposure to light, on contact with incompatible materials (see below), or spontaneously at concentrations above 10% in air at standard temperature and pressure (76mm Hg). On decomposition, material may form: Chlorine, hydrochloric acid gas and oxygen.

### Chemical stability

The material, as solution, is stable in the dark. On exposure to light, the solution may decompose to an aqueous solution of chloride and chlorate ions. In regard to vapor (gas) that may evolve from the material, see "Hazardous Decomposition" above.

### Incompatibility

Avoid exposure to light. Avoid contact with: metals, reducing agents, strong oxidizing agents, sulfur compounds or sulfur-containing components, carbon monoxide, excessive heat, mercury, organic materials, phosphorus.

## Section 11 – Toxicological Information

Chlorine dioxide gas is a mucous membrane and respiratory tract irritant. Primary routes of exposure include ingestion, skin and eye contact and inhalation of vapors which may evolve from the material.

### Target Organ Effects

This material may cause mild eye irritation; it is unlikely to cause serious eye irritation or injury.

### **Digestive Tract**

This material may cause nausea, vomiting and diarrhea; it is unlikely to cause serious digestive tract injury. Chlorine dioxide given daily in drinking water at 1-100 ppm caused a decrease in blood glutathione, altered the morphology of erythrocytes, and caused osmotic fragility in laboratory animals.

### **Respiratory Tract**

The fumes from this material may cause respiratory tract irritation, wheezing and difficulty breathing. In extreme cases, it may cause pulmonary damage and death.

### **Developmental/Reproductive Effects**

Available information is insufficient to assess risk to the fetus from maternal exposure to this material during pregnancy. Chlorine dioxide did not cause birth defects in laboratory animals even at very high exposure levels.

### **Cancer Effects**

Available information is insufficient to assess cancer risk (i.e., carcinogenicity) associated with exposure to this material. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA) United States Environmental Protection Agency (EPA) or American Conference of Industrial Hygienists (ACGIH).

### **Other Health Effects**

No data available on other possible health effects

## **Section 12 – Ecological Information**

No data available.

### Section 13 – Disposal Considerations

Disposal of this material should be in accordance with all applicable Federal, State and local rules, regulations and requirements.

### Section 14 – Transport Information

Transport of this material should be in accordance with all applicable Federal, State and local rules, regulations and requirements, including, without limitation, the rules and regulations of the US Department of Transportation, including all applicable packaging and labeling requirements.

**DOT Information:** Not regulated as a hazardous material when shipped by motor vehicle or rail car. (see 49 C.F.R. § 173.154(d)(1-2), **Exceptions for Class 8 Materials**)

**Proper shipping name:** chlorine dioxide solution (0.3%)  
**Class:** Class 8 – Corrosive.  
**Packing group:** III (must not ship or store in metal containers)  
**Hazard label:** CORROSIVE

### Section 15 – Regulatory Information

#### US Federal Regulations

#### TSCA (Toxic Substances Control Act) Status - United States

The intentional ingredients of this material are listed.

#### CERCLA RQ- 40 CFR 302.4(a)

None listed

Emergency Telephone Number: 800-424-9300 24 hours, 7 days/week

**SARA 302 Components - 40 CFR 355 Appendix A**

None

**Section 311/312 Hazard Class-40 CFR 370.2**

Immediate ( )

Delayed ( )

Fire ( )

Reactive ( )

Sudden Release of Pressure ( )

**SAARA 313 Components - 40 CFR 372.65**

Section 313 Components	CAS Number	Percent (%)
Chlorine dioxide	10049-04-4	0.03

**OSHA Process Safety Management 29 CFR 1910**

PSM Component(s)	Condition	TQ (lbs)
CHLORINE DIOXIDE		100

**EPA Accidental Release Prevention 40 CFR 68**

PSM Component(s)	Condition	TQ (lbs)
CHLORINE DIOXIDE Chlorine Oxide (ClO <sub>2</sub> )		100

**International Regulations**

Not determined

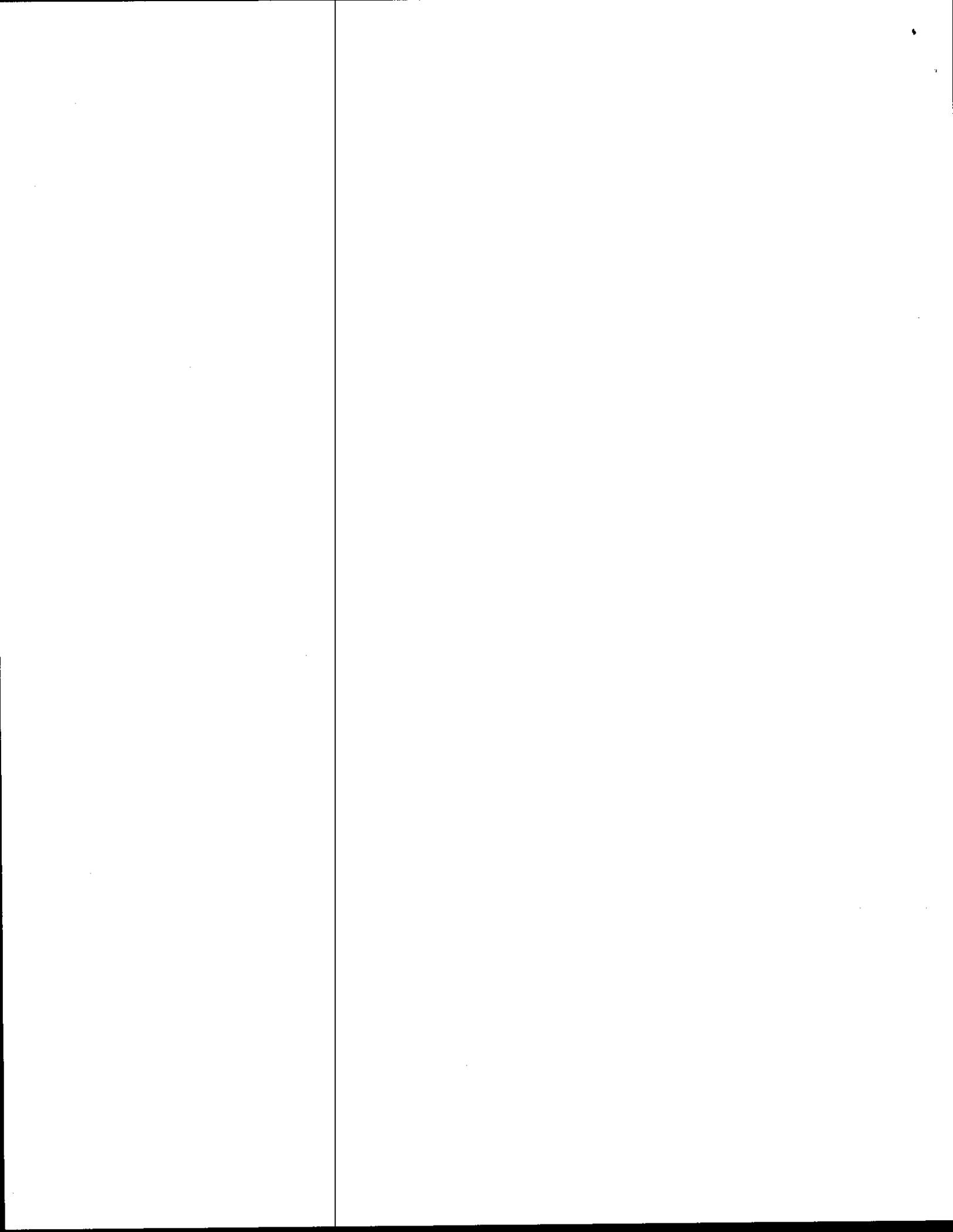
**State and Local Regulations**

California Proposition 65

None

**Section 16 – Other Information**

The information set forth herein is believed to be accurate. However, NO WARRANTY IS GIVEN AS TO THE ACCURACY OF ANY OF THE INFORMATION, WHETHER ORIGINATED BY THE COMPANY OR BY OTHERS. Recipients of this MSDS are advised to confirm, in advance of any need, that the information is current, applicable, and suitable to their circumstances.





NSF International

Ann Arbor, MI • Brussels, Belgium

April 28, 2009

Ms. Rena Bryant  
Secretary to the Board of Health  
125 Worth Street CN-31  
New York, New York 10013  
[Resolutioncomments@health.nyc.gov](mailto:Resolutioncomments@health.nyc.gov)

Dear Ms. Bryant:

Thank you for the opportunity to comment on Article 141 Revisions of the New York City Health Code. Please consider the following revisions:

§141.09

(c) Cleaning, Painting or Coating Requirements. Water tanks that are a part of a building's drinking water supply system shall be cleaned, painted and coated in accordance with the applicable provisions of the Administrative Code of the City of New York, the State Sanitary Code Part 5-1 and applicable industry standards and recommendations including, but not limited to, ~~ANSI~~, AWWA, ~~UL~~ and NSF standards.

Rationale: Only AWWA and NSF publish American national standards that cover the scope of paints and coatings for water supply products.

§141.09

(d) Disinfection. All water, dirt, and foreign material accumulated during the cleaning and/or painting process shall be discharged from the tank. The tank shall then be disinfected in accordance with the applicable provisions of the Administrative Code of the City of New York and industry standards and recommendations including, but not limited to, ~~ANSI~~, AWWA, and NSF.

Rationale: Only AWWA and NSF publish American national standards that cover disinfection chemicals or procedures.

§141.11

(d) Product Standards. The only chemicals, drinking water additives, treatment devices or equipment that may come in direct contact with drinking water for potable purposes must be in compliance with Subpart 5-1 of the State Sanitary Code, applicable industry standards and recommendations including, but not limited to, ~~ANSI~~NSF/ANSI 60 Drinking Water Treatment Chemicals-Health Effects and ~~ANSI~~NSF/ANSI 61 Drinking Water System Components-Health Effects, AWWA, ~~UL~~ and NSF.

Rationale: Only AWWA and NSF publish American national standards that cover the health effects of drinking water chemicals, drinking water system components, and treatment devices. The correction in title is due to a change in title to NSF/ANSI standards.

Rationale:

§141.11

(h) Water Quality. A permittee who is operating and/or maintaining a system under this section shall ensure that the system used to chemically treat the water meets the requirements of the State Sanitary Code, Subpart 5-1 relating to Public Water Systems and applicable industry standards and recommendations including, but not limited to, ~~ANSI~~, AWWA, ~~UL~~ and NSF standards.

Rationale: Only AWWA and NSF publish American national standards that cover drinking water treatment chemicals.

§141.17

(d) Construction Standards. No person shall construct, abandon or use any water well without a permit issued by the Department in accordance with Section 5-2.4 of the State Sanitary Code, State Sanitary Code, Subparts 5-1, 5-2 and

associated appendices (Appendix 5-A through 5-D) and applicable industry standards and recommendations including, but not limited to, ANSI, AWWA and NSF shall apply to wells constructed in New York City.

Rationale: Only AWWA and NSF publish American national standards that cover drinking water system components and well construction materials.

Proposed New Section: 141.20 Third Party Product Certification

All drinking water system components and drinking water treatment chemicals shall be certified by an ANSI accredited third party certification organization to NSF/ANSI Standard 61 Drinking Water System Components-Health Effects or NSF/ANSI Standard 60 Drinking Water Treatment Chemicals-Health Effects.

Rationale: Third party certification of products is the accepted method to verify a product conforms to a referenced standard. In addition, ANSI accreditation is the nationally accepted qualification for third party certification organizations.

Thank you for the consideration of our comments. If you have any questions, please contact me directly.

Regards,

***Jeremy Brown***

Jeremy Brown  
Codes & Regulatory Manager  
NSF International  
phone 1-734-769-5196  
mobile 1-734-395-4667  
brown@nsf.org