

# DECHLORINATION

## Clean Water and Water Quality Acts

The Clean Water Act of 1972 and the Water Quality Act of 1987 recognize the harmful effects of very low doses of chlorine to fish and wildlife. As a cheap, effective neutralizer of chlorine, sulfur-based chemicals became widely used in the treatment of water being released to the environment. But sulfur-based chemicals have adverse effects – such as depleting oxygen levels in water – which can be more detrimental to the environment than the discharging of the chlorinated water itself. To preserve our environment and natural resources, the federal laws governing water quality require that the best available technology be applied when reducing pollutants from our waters and environment. While sulfite chemicals are still widely used for dechlorination in treatment plants where all aspects of the process can be monitored and controlled, when it comes to field dechlorination where water is released to receiving streams and wetlands with minimal control, there is a better way....

## Vitamin C

Enter Vitamin C dechlorination. Vitamin C (ascorbic acid) has long been used in EPA and APHA methods for the dechlorination of lab samples. In the medical industry, it is the standard for critical applications where the introduction of chlorinated water or toxic chemicals would be catastrophic. Breeders of rare fish also choose Vitamin C for dechlorinating their water. Now Vitamin C is being used in field dechlorination processes such as hydrant flushing and water main breaks. It is a safer alternative for both the environment and for the operators using it. And it benefits from favorable public perception, under whose watchful eyes the treatment process typically takes place.

## Vita-D-Chlor

Vita-D-Chlor was developed to make Vitamin C dechlorination easy. Four options are available for dechlorinating in a variety of field applications. Vita-D-Chlor granular, Neutral, Tablets, and Slo-Tabs all provide responsible dechlorination options that help protect aquatic habitats by minimizing the introduction of contaminants and not depleting oxygen levels in our waterways.



**SAFE  
&  
EASY**  
Dechlorination

EPA

### **U.S. EPA Water Quality Criteria For Total Residual Chlorine (TRC)**

Acute Toxicity Criterion for receiving streams: 0.019 mg/L (ppm)

Chronic Toxicity Criterion for receiving streams : 0.011 mg/L (ppm)

### **Canadian Environmental Quality Guidelines**

0.019 mg/L (ppm): 1987 proposed Water Quality Criterion for receiving streams

### **AWWA Standard C655-09**

(under IIA US Regulations, last paragraph of subsection 1.) "Chlorine discharge limits in water releases into receiving streams and wetlands shall not exceed 0.01 mg/L (or a more stringent limit)."

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