



## **Sampling Procedure for Cyanide Samples Containing Chlorine**

Chlorine and other oxidizing agents can decompose most cyanide agents, making it important to treat samples that contain these agents prior to their final preservation. The EPA requires chlorine and other like substances to be removed in the field prior to NaOH preservation. Accompanying these instructions should be two **1L bottles**, one containing **Sodium Thiosulfate** (a dechlorinating agent), and one containing **Sodium Hydroxide** (NaOH, final preservative).

1. Collect your sample in the bottle preserved with Sodium Thiosulfate and do not overfill the bottle. Leave approximately  $\frac{1}{2}$  inch to leave adequate room for mixing.
2. Once sample is collected, replace cap and invert sample 5 times.
3. After sample has been mixed, carefully pour contents of sample preserved with Sodium Thiosulfate into Sodium Hydroxide preserved bottle.
4. Once sample has been sufficiently preserved, indicate on bottle that sample was treated for chlorine. It should also be noted on the chain-of-custody that samples were treated to remove chlorine in the field.
5. The sample must now be cooled to 4 C and needs to be analyzed within 14 days.

### **References:**

Standard Methods for the Examination of Water and Wastewater, 22<sup>nd</sup> Edition, 2012.

Environmental Protection Agency, 40 CFR Part 122, 136, et al., Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; National Primary Drinking Water Regulations; and National Secondary Drinking Water Regulations; Analysis and Sampling Procedures; Final Rule, March 2007.

Office of Ground Water and Drinking Water, EPA Pub. No. 815-R-05-004, Manual for the Certification of Laboratories Analyzing Drinking Water, (5<sup>th</sup> ed. January 2005).