

**Q: What is a corrosion control chemical?**

A: A chemical that either alters the treated water chemistry or interacts with the surface of metallic materials in the water distribution system to inhibit corrosion and prevent the formation of soluble lead compounds.

**Q: Why is sodium hydroxide used in drinking water?**

A: Sodium hydroxide is used as a pH adjusting chemical in the treatment of drinking water to control the corrosion of metals such as lead from pipes into the drinking water.

**Q: How does sodium hydroxide work?**

A: Sodium hydroxide is used in the treatment of drinking water to raise the pH of the water to a level that minimizes the corrosion. Raising the pH remains one of the most effective methods for reducing lead corrosion and minimizing lead levels in drinking water.

**Q: Is it safe to drink my water if sodium hydroxide is added?**

A: Sodium hydroxide use as a corrosion inhibitor is listed in NSF/ANSI Standard 60. These standards have been designed to safeguard drinking water by ensuring that additives meet minimum health effects requirements and thus are safe for use in drinking water. (Health Canada – [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)).

**Q: Why is sodium hydroxide the best choice as a corrosion inhibitor?**

A: Sodium hydroxide was selected due to the chemistry of the City of Thunder Bay's raw source water (Lake Superior) and conditions in the distribution system (pipes). The pristine raw water from Lake Superior is very "soft" with little buffering capacity; the water may leach minerals and contaminants from whatever material it comes into contact with. The addition of sodium hydroxide prior to transmission through distribution pipes will adjust the pH to a level that reduces this leaching capability of the water. As a corrosion inhibitor, sodium hydroxide is the best choice to treat our source water of Lake Superior.

**Q: Will I be able to taste or smell sodium hydroxide in my tap water?**

A: No. There will not be a difference in the taste or smell of your tap water.

**Q: Will the addition of sodium hydroxide in my drinking water have an adverse effect on my personal filter that I have installed?**

A: No. However, for all privately-purchased water filtration systems it is recommended to always refer to the manufacturer's instructions.

**Q: How will the addition of sodium hydroxide in our drinking water affect the treatment of waste water?**

A: It is not expected that the addition of sodium hydroxide will affect our wastewater treatment process. The amount added will be small in relation to the many other substances found in raw sewage.