**Mills Drinking Water FAQ**

Drinking water is any water supplied for the purpose of human consumption or domestic use. The source of the water can be ground water from wells or surface water from rivers and lakes. Public Water Systems that supply drinking water must follow certain federal and state safe drinking water regulations. The purpose of this fact sheet is to define and explain Disinfection Byproducts (DBPs).

**What are DBPs?**

Most drinking water must be treated with disinfectants in order to kill germs. DBPs form when disinfectants such as chlorine, chloramines, chlorine dioxide or ozone react with organic and inorganic substances present in the raw water. The primary organic DBP precursors are derived from terrestrial and aquatic plants. Bromide ion is the main inorganic precursor for DBPs.

**Which DBPs are regulated?**

There are hundreds of different DBPs that can be formed in drinking water. The type and quantity depend, in part, on the source water quality, type of disinfectant, and distribution system operation. The following DBPs are regulated with a monitoring requirement and a Maximum Contaminant Level (MCL):

- Total Trihalomethanes (THM)
- Haloacetic Acids (HAA)
- Bromate
- Chlorite

**What levels of DBPs are allowed in drinking water?**

There are four (4) MCLs for DBPs: THM may be present at 0.080 milligrams per liter (mg/L), HAA may be present at 0.060 mg/L, Bromate may be present at 0.010 mg/L, Chlorite may be present at 1.0 mg/L

**How often is monitoring required?**

The frequency of monitoring varies, depending on the public water system size, source type, and type of disinfectant used. Past levels of DBPs may also result in either an increase or decrease in monitoring frequency. Monitoring can be required daily, monthly, quarterly, annually, or once every three years.

**What happens when the MCL is exceeded?**

An MCL violation is issued to any public water system that exceeds the MCL for one or more DBPs. Failure to reduce these levels may result in an enforcement action by EPA.

**What are the health effects of DBPs?**

There have been many studies on the health effects of exposure to DBPs. Although some studies indicate the potential for both short- and long-term adverse health effects, others do not. Some potential health effects include cancer, as well as reproductive and developmental disorders. There is still some uncertainty regarding an individual's risk when exposed to levels of DBPs above the MCLs.

**Can drinking water be treated to remove DBPs?**

Yes. There are a variety of treatments available to public water systems to reduce the level of DBPs in drinking water. Treatment is typically one of two types:

- Reduction in the levels of compounds that cause the creation of DBPs; or
- Removal of already-formed DBPs.

Home treatment, such as activated charcoal, may also help reduce the levels of DBPs in your drinking water. Additional information on home treatment units can be obtained through the National Science Foundation (NSF) website at www.nsf.org. NSF is an organization that certifies that products have been independently tested for effectiveness according to their manufacturers' claims.