



Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Arsenic has been a major concern of the University Water Plant for many years. Naturally occurring Arsenic is very plentiful in the Fairbanks area. In 2005, the UAF Water Plant was

granted reduced monitoring status by the ADEC.

An arsenic sample was collected in December 2010. Results were 2.58 ppb (parts per billion). For comparison, the untreated, raw water had an arsenic level of 7.5 ppb. The UAF Water Plant has implemented the removal of all incoming Arsenic.

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The table to the left indicates average results for monthly testing performed at the UAF Water Plant. These tests and others provide water plant personnel with vital performance data on chemical treatment and efficiency of the overall treatment process.

Most of the parameters within the table are considered Secondary Contaminants. Secondary Contaminants are enforceable guidelines that may cause cosmetic or aesthetic effects to the finished treated water. Alaska DEC may enforce Secondary standards if public health is at risk.

The 2010 averages for UAF drinking water indicated a higher than normal Manganese level. This does not pose a health risk, but may cause discolored water. Manganese is naturally occurring in the groundwater and varies in concentration throughout the year.

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

The UAF Water Plant complied with the Radionuclide Rule during the period from 1991 to 1994. The maximum concentration of radionuclides in the water was determined to be 0.0001 microcuries per liter (μCi/L) for radium-226 and radium-228, and 0.0001 microcuries per liter (μCi/L) for uranium-238 and uranium-235. The maximum concentration of radionuclides in the water was determined to be 0.0001 microcuries per liter (μCi/L) for radium-226 and radium-228, and 0.0001 microcuries per liter (μCi/L) for uranium-238 and uranium-235.

