

Groundwater/Well Water/Uranium Info:

Uranium in Well Water

Uranium is a naturally occurring radioactive metal that occurs in low concentrations in nature. It is present in certain types of soils and rocks, especially granites. Uranium has the chemical symbol "U". The interim maximum acceptable concentration (IMAC) of uranium in drinking water in Health Canada's Guidelines for Canadian Drinking Water Quality opens new window is 0.020 mg/L (milligrams per litre).

What are the known sources of uranium?

Naturally occurring uranium in groundwater is a result of the dissolution of uranium bearing minerals that have been in contact with groundwater for long periods of time. Elevated concentrations of natural uranium in well water are more likely to be found in drilled wells that obtain their water from the cracks and fractures of bedrock, rather than dug wells or surface water supplies. Uranium can also be found in the environment as a result of human activities such as mill tailings, emissions from the nuclear industry, and the combustion of coal and other fuels.

What are the environmental health concerns of uranium?

Naturally occurring uranium has very low levels of radioactivity. The chemical properties of uranium in drinking water are of greater health concern than its radioactivity. Most ingested uranium is due to food intake with lesser amounts accumulated from water or from the air. Uranium mostly is rapidly eliminated from the body, however a small amount is absorbed and carried through the blood stream. Studies show that elevated levels of uranium in drinking water can affect the kidneys. Bathing and showering with water that contains uranium is not considered a health concern. There is inadequate data available to evaluate the carcinogenicity of ingested uranium.