Strontium and Drinking Water Concerns

Strontium occurs naturally in the environment and is an alkaline earth metal that is found naturally in the minerals celestine and strontianite. Air, dust, soil, foods and drinking water all contain small amounts of strontium. Ingestion of small amounts of strontium is not harmful. However, high levels of strontium can occur in water drawn from bedrock aquifers that are rich in strontium minerals. Strontium occurrence is also linked to other sources such as air contamination from milling processes, coal burning and phosphate fertilizers. In some cases, low levels of strontium have been administered to osteoporosis patients as a treatment of their condition.

The risk posed by strontium depends on the concentration ingested and on the exposure conditions and the U.S. environmental Protection Agency’s current reference concentration indicates that ongoing exposure to strontium at levels of more than 1,500 parts per billion per day may lead to negative health effects. There is no evidence that drinking water with trace amounts of naturally-occurring strontium is harmful. However, exposure to high levels of naturally-occurring strontium during infancy and childhood can affect bone growth and cause dental changes, and there is some evidence that strontium increases bone density in adults.

During 2014 the Port Washington Water District performed testing of strontium in accordance with UCMR3. Strontium detections ranged from 25 to 306 ppb which is far below the 1,500 ppb EPA health reference level.

All results of our water quality testing are presented to our residents in our annual drinking water quality report and our tap water remains to be of the highest quality possible and safe to drink. For additional information, please visit the UPSEPA’s website at www.epa.gov, or contact the Port Washington Water District at 516.767.0171 or at info@pwwd.org.

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