

LAKEVILLE BOARD OF HEALTH

PUBLIC HEALTH ADVISORY

WARNING: EXCESSIVE MANGANESE CAN NOW BE CONSIDERED TO BE A PUBLIC HEALTH RISK

January 2012

Previously, Manganese was stated not to be a health issue on analytical well quality reports whereas new information has now been released to advise consumers that Manganese may be present in well water in sufficient concentrations that may affect human health.

The United States Environmental Protection Agency (EPA) has set a health advisory for lifetime exposure for Manganese in drinking water of 0.3 mg/L (300 ug/L). The EPA considers this level safe from potential neurological impacts over a lifetime. For short term exposure, EPA advises that levels in drinking water be below 1 mg/L (1000 ug/L). In addition, EPA advises that infants should not drink water that contains Manganese above 0.3 mg/L (300 ug/L) at any time, especially if formula fed.

Massachusetts Department of Environmental Protection (DEP) recommends that children under the age of three should also not be given water with levels containing more than 0.3 mg Mn/L (300 ug Mn/L). For more information, please see the Manganese Fact Sheet at http://www.mass.gov/dep/water/drinking.htm.

Historically, there has been an aesthetics based secondary maximum contaminant level for Manganese of 50 ug/L micrograms per liter or 50 (ppb) parts per billion. At levels above 0.05 mg/L (50 ug/L), water may appear brown, taste unpleasant and may leave black stains on bathroom fixtures & laundry.

The Lakeville Board of Health recommends contacting a water treatment specialist or plumber to incorporate a treatment system for Manganese when recommended levels are exceeded. In addition, we recommend all wells be tested at least annually for all potability parameters as defined in the Lakeville Board of Health Well Regulations. Lakeville potability parameters include, but are not limited to, Volatile Organic Compounds (VOC's), Total Coliform Bacteria, Nitrate Nitrogen, Nitrite Nitrogen, Ammonia Nitrogen, Manganese, Arsenic, Copper, Sodium and Ph.