Primary Drinking Water Standards Caribou Utilities District 2017 The following contaminants were detected in Caribou's drinking water. All those indicated below are below the Maximum Contaminant Level (MCL) allowed by the US EPA and Maine Department of Human Services, Drinking Water Program. Not shown are nearly 100 other contaminants for which we tested, but were not detected. These included pesticides, herbicides, and many other agricultural and industrial chemicals. A complete listing of all tests and results is available at the Caribou Utilities District office. No violations in 2017 Maximum Contaminant Maximum Contaminant Actual Actual Level Goal Level Test Results Test Results (Average) (Range) MCLG MCL **Parameter** Source Microbiological Total Coliform Bacteria (1) (5/month) 5 tests / month distribution system 0 pos 1 pos / mo or 5% 0 pos Naturally present in # of samples positive 0 pos. of 60 tests environment Organic Chemicals / Disinfection LRAA 2017 Byproducts (9.2 - 9.2) LRAA, Locational Running Annual Avg. Disinfection By-product Total Trihalomethanes (9) 80 ppb LRAA 9.00 ppb dag 0 Total Haloacetic Acids (9) dag0 daq00 LRAA 0.00 ppb (0.0 - 0.0) LRAA, Locational Running Annual Avg. Disinfection By-product 0.22 ppm Chlorine Residual 0.17 - 0.29 ppm Disinfection By-product 4ppm 4ppm Inorganic Chemicals 10 ppb ND 02/24/15 natural erosion, orchards Arsenic dqq 0 0.034 ppm Barium 2 ppm 2 ppm 02/24/15 drilling wastes; natural erosion Chromiun 50 ppb 02/24/15 natural, steel, pulp mills 50 ppb 3.1 ppb AL 1.3ppm 0.17 ppm / 90th %tile 0 failed of 20 homes tested 12/12/17 1.3ppm corrosion of plumbing Copper (4) Fluoride (3) 4 ppm 0.7 ppm annual average (16 tests/yr.) Natural, fertilizer, additive 4ppm 0.62 ppb / 90th %tile l ead (4) 0 ppb AL=15ppb 0 failed of 20 homes tested 12/12/17 corrosion of plumbing Nitrate(5) 10 ppm 10ppm 2.3 nnm 04/18/17 Fertilizer, septic runoff Sodium 100 ppm none 13 ppm 02/24/15 Natural, road salt Radionuclides Gross Alpha Screen (6) 0 15 pCi/L 0.296 02/15/06 Naturally occurring radioactivity Gross Alpha Particle ACT (6) 5 pCi/L 0.10 pCi/L 01/18/06 Naturally occurring radioactivity 0 431 pCi/L 297pCi/L 2/15/2006 11/25/2006 Radon Screen (8) NA 4,000 pCi/L Naturally occurring radioactivity Synthetic Organics (Waiver) 20 ug/L 0.42 ug/L 6/23/15 11/24/15 Diguat 0.38 ug/L **Definitions and Footnotes** Maximum Contamination Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. Maximum Contamination Level (MCL): The highest level of a contaminant that is allowed in drinking water. Variance or Waiver: State or US EPA permission not to meet an MCL, testing requirement, or a treatment technique under certain conditions (e.g. waiver to Dioxin testing). Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water (e.g. treatment technique for turbidity). Action Level: (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow Running Annual Average (RAA): A 12 month rolling average of all monthly or quarterly samples at all locations. Calculation of RAA may contain data from the previous year. Locational Running Annual Average (LRAA): A 12 month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of LRAA may contain data from the previous year. ppm = parts per million or mg/L = milligrams per Liter ppb = parts per billion; ppt = parts per trillion; ppq = parts per quadrillion pCi/L- picocuries per liter, a measure of radioactivity. ND = None detected or detected below the reporting level pos = positive sample; ntu or NTU = mephelometric turbidity units (1) Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month (2) E. Coli: E. coli are bacteria whose presence indicates the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. (3) Fluoride: Fluoride levels must be maintained between 0.5 - 1.2 ppm, for those water systems that fluoridate the water. Optimum level is 0.7 ppm 4) Lead/Copper levels are measured at consumer's tap. 90% of tests must be equal to or below the action level (AL) 5) Nitrate: Nitrate in drinking water above 10 ppm is a health risk for infants of less than six months of age. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. High nitrate levels in drinking water can cause blue baby syndrome. If you are caring for an infant, you should ask for advice from your health care provider. (6) Arsenic: While your drinking water may meet EPA standards for arsenic, if it contains between 5 to 10 ppb you should know the standard balances the current understanding of arsenic's possible health effects against the cost of removing it from drinking water. The 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. Quarterly compliance is based on running annual average. 7) Gross Alpha: Action level over 5 pCi/L requires testing for Radium 226 & 228. Action level over 15 pCi/L requires testing for Uranium. Compliance based on Gross Alpha results less Uranium results = Net Gross Alpha. (8) Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4000 pCi/L, effective 1/1/2007. If Radon exceeds the MEG in water, treatment is recommended. It is advisable to test indoor air for Radon. The USEPA is proposing setting Federal standards for Radon in public drinking water. The U.S. EPA is considering setting lower standards for Radon in drinking water. (9) TTHM/HAA5: Total Trihalomethanes and Haloacetic Acids (TTHM and HAA5) are formed as a byproduct of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance based on running annual average.