Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES [1]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
1,1,1-Trichloroethane (ppb)	2009	30	30	1.05	0.61–1.19	No	Discharge from metal degreasing sites and other factories
1,1-Dichloroethane (ppb)	2009	50	NA	0.24	ND–0.65	No	Discharge from metal degreasing sites and other factories
Chlorine (ppm)	2009	[4]	[4]	0.29	0.02–0.68	No	Water additive used to control microbes
Combined Radium (pCi/L)	2006	5	0	0.01	ND–0.04	No	Erosion of natural deposits
Fluoride (ppm)	2005	4	4	0.07	ND–0.2	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate[2] (ppm)	2009	10	10	6.54	0.02–18.4	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	0.04	ND–0.43	No	By-product of drinking water chlorination
Uranium (ppb)	2006	30	0	2	1–3	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2009	1.3	1.3	0.179	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2009	15	0	4	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RUL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2008	250	NA	70	37–125	No	Runoff/leaching from natural deposits
Hardness [as CaCO3] (ppm)	2008	250	NA	241	179–345	No	Naturally occurring
Manganese[3] (ppm)	2009	0.05	NA	0.25	0.013–1.40	No	Leaching from natural deposits
pH (Units)	2008	6.5–8.5	NA	8.12	7.31–10.70	No	Naturally occurring
Sodium[4] (ppm)	2009	50	NA	37.5	8–89	No	Naturally occurring
Sulfate (ppm)	2008	250	NA	37	29–43	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2008	500	NA	314	236–398	No	Runoff/leaching from natural deposits
Zinc (ppm)	2008	5	NA	0.23	ND–0.44	No	Runoff/leaching from natural deposits; Industrial wastes

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2008	141	122–178
Dichloroacetic Acid (ppb)	2009	0.88	ND–4.5
Trichloroacetic Acid (ppb)	2009	1.32	ND–15.8

[1] Under a waiver granted on December 30, 1998, by the State of New Jersey Department of Environmental Protection, our system does not have to monitor for synthetic organic chemicals/pesticides because several years of testing have indicated that these substances do not occur in our source water. The SDWA regulations allow monitoring waivers to reduce or eliminate the monitoring requirements for asbestos, volatile organic chemicals, and synthetic organic chemicals. Our system received monitoring waivers for synthetic organic chemicals and asbestos.

[2] Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

[3] The RUL for manganese is based on staining laundry. Manganese is an essential nutrient, and toxicity is not expected from levels that would be encountered in drinking water.

[4] For healthy individuals, the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the RUL may be of concern to individuals on a sodium-restricted diet.

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

RUL (Recommended Upper Limit): The highest level of a contaminant recommended in drinking water. RULs are set to protect the odor, taste, and appearance of drinking water.

Source Water Assessment

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Reports and Summary for this public water system. They are available at www.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact John F. Wegele, Operations Manager, at (973) 839-3044 for more information.

The source water assessment performed on our three wells determined the following susceptibility ratings for the seven contaminant categories and radon:

1) Pathogens — All three wells are rated medium susceptibility.

2) Nutrients — Two wells are medium susceptibility and the third was rated high.

3) Pesticides — All three wells are rated at low susceptibility.

4) Volatile Organic Compounds — Two wells are low susceptibility and one well was rated at high susceptibility.

5) Inorganics — Two wells are medium susceptibility and the third was high.

6) Radionuclides — All three wells are medium susceptibility.

7) Radon — One well was rated at medium susceptibility and the other two were rated at high.

8) Disinfection by-product precursors — All three wells are medium susceptibility.

If a system is rated highly susceptible for a contaminant category, it does not mean a customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water, not the existence of contamination. Public water systems are required to monitor for regulated contaminants and to install treatment if any contaminants are detected at frequencies and concentration above allowable levels.

In its review, the NJDEP found the following potential contaminant sources within the source water assessment area for our sources:

1) Various underground storage tanks

2) Wastewater treatment facility

3) Class B recycling center

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Pompton Lakes Borough MUA is responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.