

## 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 table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

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.

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.

### REGULATED SUBSTANCES<sup>1</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>1,1,1-Trichloroethane</b> (ppb)	2008	30	30	0.47	ND–1.54	No	Discharge from metal degreasing sites and other factories
<b>1,1-Dichloroethylene</b> (ppb)	2008	2	2	0.45	ND–0.43	No	Discharge from industrial chemical factories
<b>Alpha Emitters</b> (pCi/L)	2006	15	0	2.07	ND–3.87	No	Erosion of natural deposits
<b>Barium</b> (ppm)	2008	2	2	0.03	ND–0.06	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Chlorine</b> (ppm)	2008	[4]	[4]	0.18	0.01–0.91	No	Water additive used to control microbes
<b>Combined Radium</b> (pCi/L)	2006	5	0	0.01	ND–0.04	No	Erosion of natural deposits
<b>Fluoride</b> (ppm)	2005	4	4	0.07	ND–0.2	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Nitrate</b> (ppm)	2008	10	10	0.3	ND–0.9	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>TTHMs [Total Trihalomethanes]</b> (ppb)	2008	80	NA	1.06	ND–1.5	No	By-product of drinking water chlorination
<b>Uranium</b> (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
<b>Copper</b> (ppm)	2006	1.3	1.3	0.23	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

### SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	RUL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Chloride</b> (ppm)	2008	250	NA	70	37–125	No	Runoff/leaching from natural deposits
<b>Hardness [as CaCO<sub>3</sub>]<sup>2</sup></b> (ppm)	2008	250	NA	241	179–345	No	Naturally occurring
<b>Manganese<sup>3</sup></b> (ppm)	2008	50	NA	0.27	0.03–1.46	No	Leaching from natural deposits
<b>Sodium<sup>4</sup></b> (ppm)	2008	50	NA	37.3	30–57	No	Naturally occurring
<b>Sulfate</b> (ppm)	2008	250	NA	37	29–43	No	Runoff/leaching from natural deposits; Industrial wastes
<b>Total Dissolved Solids</b> (ppm)	2008	500	NA	314	236–398	No	Runoff/leaching from natural deposits
<b>Zinc</b> (ppm)	2008	5	NA	0.23	ND–0.44	No	Runoff/leaching from natural deposits; Industrial wastes
<b>pH</b> (Units)	2008	6.5–8.5	NA	7.94	7.06–8.67	No	Naturally occurring

## UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2008	141	122–178
Bromodichloromethane (ppm)	2008	0.06	ND–0.407
Bromoform (ppm)	2008	0.26	ND–1.65
Dibromochloromethane (ppm)	2008	0.20	ND–0.949

<sup>1</sup> 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.

<sup>2</sup> If substantial amounts of either calcium or magnesium, both nontoxic minerals, are present in drinking water, the water is said to be hard. Hard water does not dissolve soap readily, so making lather for washing and cleaning is difficult. Conversely, water containing little calcium or magnesium is called soft water.

<sup>3</sup> The RUL for manganese is based on staining laundry. Manganese is an essential nutrient, and toxicity is not expected from high levels which would be encountered in drinking water. A manganese exceedance in a water system does not pose a health risk, but the NJDEP requires a public notice. Please call the Pompton Lakes Municipal Utilities Authority at (973) 839-3044 with any questions.

<sup>4</sup> 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 Recommended Upper Limit (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 which 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.

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

