

## Annual Drinking Water Quality Report

### Borough of Butler Water Department

**For the Year 2005, Results from the Year 2004**

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

The Butler Water Department routinely monitors for over 80 contaminants in your drinking water according to Federal and State laws. This table lists only those contaminants detected, and shows the results of our monitoring from January 1<sup>st</sup> to December 31<sup>st</sup>, 2004. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

<b>TEST RESULTS</b>						
<b>Contaminant:</b>	<b>Violation Y/N</b>	<b>Level Detected</b>	<b>Units of Measurement</b>	<b>MC LG</b>	<b>MCL</b>	<b>Likely Source of Contamination</b>
<b>Microbiological Contaminants:</b>						
Turbidity Test results Yr. 2004	No	Highest single Measurement = 0.5 NTU  Lowest Monthly % February 2004 = 98.28%	NTU	n/a	TT=0.3 NTU TT=% of samples <0.3NTU	Soil runoff
<b>Radioactive Contaminants:</b>						
Alpha emitters Test results Yr. 2003	No	0.05	pCi/l	0	15	Erosion of natural deposits
<b>Inorganic Contaminants:</b>						
Copper Test results Yr. 2003	No	0.19 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test results Yr. 2003	No	<5 No samples exceeded the action level.	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) Test results Yr. 2004	No	0.2	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Volatile Organic Contaminants</b>						
TTHM [Total trihalomethanes] Test results Yr. 2004	No	Running Annual Average = 41 Highest Quarterly Average = 61 Range= 28.1 to 70.1	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2004	No	Running Annual Average = 18 Highest Quarterly Average = 22 Range = 6.1 – 31.5	ppb	N/A	60	By-product of drinking water disinfection
<b>Microbiological Contaminants</b>						
Total coliform Bacteria	No	1 positive monthly sample in July 2004		0	1	Naturally present in the environment

<b>Regulated Disinfectants Test results Yr. 2004</b>	<b>Level detected</b>	<b>MRDL</b>	<b>MRDLG</b>
Chlorine	Range = 0.3 – 0.8 Highest result: 0.80	4 ppm	4 ppm

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Maximum Residual Disinfectant Goal (MRDLG):** 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 contamination

We had a positive Total Coliform sample in July 2004. We believe this was a sampling technique or laboratory error, as all subsequent sampling was

negative. Total Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

#### **Our water source:**

We draw our water from the Kakeout reservoir on Bubbling Brook Road in the Borough of Kinnelon, Morris County. *We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is (name the source and type, i.e., wells, OurwellsdrawfromtheDuncanAquifer, surface water, i.e., River Jordan or we purchase our water from the City of Waterville which is treated surface water from Lake Duncan.) (This is REQUIRED information).* The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at [WWW.state.nj.us/dep/swap](http://WWW.state.nj.us/dep/swap) or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. This water system's source water susceptibility ratings and a list of potential contaminant sources is attached.

#### **Potential sources of contamination:**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

#### **For additional information:**

If you have any questions about this report or concerning your water utility, please contact Ed Becker, Chief Water Treatment Plant Operator at 973-838-0063. If you want to learn more, please attend any of our regularly scheduled meetings. Meetings are held at Borough Hall, 1 Ace Road, on the third Tuesday of each month at 7:30 p.m.

#### **Definitions:**

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal -The "Goal"(MCLG) is 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.

#### **To ensure the continued quality of your water:**

We treat our water in several ways. We add alum and lime to promote clarity and control pH, and we add a small amount of chlorine to disinfect, as a precautionary measure. We use polyphosphate to protect residential plumbing.

**Waivers:**

The Safe Drinking Water Act 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 asbestos and synthetic organic chemicals.

**We at the Butler Water Department work hard to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.**