ANNUAL DRINKING WATER QUALITY REPORT 2018
2017 year – report created 03/30/2018
UPPER DEERFIELD TOWNSHIP WATER UTILITY
PWSID# NJ0613004

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water services that 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 you water.

SYSTEM INFORMATION:

The Upper Deerfield Water Utility draws its water supply from four wells drilled into the Kirkwood-Cohansey aquifer at depths ranging between 120 and 160 feet. The water is then treated at one of two separate facilities. These plants remove radionuclides, adjust pH, and chlorinate for disinfection. The water system has a storage capacity of 750,000 gallons and a supply capacity of 2.23 million gallons per day.

CONTACT INFORMATION:

If you have any questions about this report or wish to address any concerns, please contact John Hoogendorn at 609-381-6443. We want our customers to be informed about their water. You may also attend any of our regularly scheduled Township Committee meetings which are held on the **first and third Thursday of every month at 7:00 PM at the Municipal Building located at 1325 Hwy 77 in Seabrook.**

SOURCE WATER INFORMATION:

The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Summary. This study was done to identify potential contamination sources near public water supplies. You may obtain a copy of this report by contacting the Township Water Utility at 609-381-6443.

The source water assessment determined the following:

Seven Contaminant categories (and radon) were used to determine the system's susceptibility, and rating of high(H), medium(M) and low(L) were assigned. The categories are listed below.

Category	*Well 3*	*Well 4*	*Well 15*	*Well 17*
Pathogens: Bacteria and Viruses	L	L	L	L
Nutrients: Compounds, Minerals, and Elements	H	H	H	H
Pesticides: Man-made chemicals, herbicides, insecticides	M	M	M	M
Volatile Organic Compounds: Chemicals and Solvents	L	L	M	M
Inorganics: Natural and man-made minerals	L	L	M	M
Radionuclides: Radioactive substances-natural and man-made	H	H	H	H
Radon: Naturally occurring gas	M	M	M	M
Disinfectant By-product Precursors: Disinfection reaction with organic Material:	M	M	M	M

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 concentrations above allowable levels.

Potential Contaminant Sources:

Nitrates-Agricultural land use
Nutrients: Agricultural land use
Pesticides-Agricultural land use
Radio nuclides and Radon- Naturally occurring

If you have any questions regarding the source water assessment report or summary please contact the Bureau of Safe Drinking Water at swap@dep.state.nj.us or 609-292-5550.

EDUCATIONAL INFORMATION:

All 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 Safe Drinking Water Hotline at 1-800-426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, natural occurring minerals and in some cases, radioactive material can pick up substance resulting from the presence of animal or human activity.

Contaminants that may be present 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 or gas production, mining, and 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 by-products of industrial processes and petroleum production, and can 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 be sure 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 .

SAMPLE TESTING WAIVERS:

The Safe Drinking Water Act regulations allow for monitoring waivers to reduce or eliminate the monitoring requirements for some contaminants. Our system received waivers for the following: Asbestos, VOC's.

The Upper Deerfield Township Water Utility routinely monitors for constituents in your drinking water according to Federal and State Laws. This table shows the results of our monitoring for the period of January 1, 2017 to December 31, 2017.

TEST RESULT INFORMATION

The State allows us to monitor for some constituents less than once a year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old. All sample dates are noted in the water quality data table.

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 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)

**Alpha Emitters: Certain minerals are radioactive and may emit a form of radiation known as Alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.*

***Combined radium 226/228: Some people who drink water containing radium 226 or radium 228 in excess of the MCL over many years may have an increased risk of getting cancer.*

Nitrates: Nitrates 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 care for an infant you should ask advice from your health care provider.

Lead: 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. The Upper Deerfield Water Utility is responsible for providing high quality drinking water, but 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 is available from the Safe Drinking Water Hotline or at http://epa.gov/safewarwe/lead.

Aluminum: Aluminum is a secondary contaminant. Secondary contaminants are generally based on aesthetics of water such as taste odors, or staining. High levels of aluminum affects the color of water. There are currently no listed health effects.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl2) (ppm)	4	4	.95	.71	1.2	2017	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	2.5	NA	1.6	2017	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	17.4	3.1	6	2017	No	By-product of drinking water disinfection
Inorganic Contaminants								
Barium (ppm)	2	2	.0142	NA	NA	2015	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	8.9	8.1	9.5	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	3.4	1.4	6.7	2017	No	Erosion of natural deposits

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range Low	Range High	Sample Date	Violation	Typical Source
Radium (combined 226/228) (pCi/L)	0	5	1.7	.5	3.2	2017	No	Erosion of natural deposits
Synthetic organic contaminants including pesticides and herbicides								
Dibromochloropropane (DBCP) (ppt)	0	200	.078	NA	NA	2017	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Ethylene dibromide (ppt)	0	50	.6	NA	NA	2017	No	Discharge from petroleum refineries

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	.0338	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	15	1	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

Contaminants	State MCL	Your Water	Violation	Explanation and Comment
Aluminum	.2 mg/l	.32 mg/l	No	Naturally occurring

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)

Unit Descriptions	
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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