YEAR 2018 ANNUAL DRINKING WATER QUALITY REPORT
NORTH EAST TOWNSHIP WATER DEPARTMENT
PUBLIC WATER SUPPLY IDENTIFICATION NO. 6250086

Purpose of this report:

The PA Department of Environmental Protection (PA DEP) adopted regulations requiring public water suppliers to provide an Annual Drinking Water Quality Report to its consumers.

Pursuant to these regulations, we are presenting our Annual Drinking Water Quality Report. This report provides information on last year's (2018) water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

North East Township purchases all of its public water from North East Borough. The purchased water is conveyed to all users within a Township owned, operated, and maintained distribution system.

Spanish (Espanol) Statement:

Spanish Statement – Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que to entienda bien.

Translation – This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Where does my water come from?

Township water sources (by way of the Borough) consist of Lake Erie, a spring, and three impoundment reservoirs (Smith Reservoir, Grahamville Reservoir and Eaton Reservoir). In November 2004, the North East Borough Water Authority completed construction of facilities to utilize Lake Erie as a water supply source. At present, about 92% of our water comes from Lake Erie and the other 8% from the reservoirs and spring.

Is my water safe?

In 2018, your tap water met all EPA and state drinking water health standards.

While our water is safe for the vast majority of our customers, 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 from their health care providers as to the safety of the drinking water for their particular condition. EPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

What future improvements are planned?

In their continuing efforts to maintain a safe and dependable water supply, the North East Borough Water Authority (NEBWA) has previously completed several upgrades to the water system. In August 2005, the NEBWA finished construction of the expansion of the water filtration plant. This increased the

capacity of the water filtration plant allows an increase in the amount of water that the Borough is able to treat and accommodates the water needs of the community for the future. NEBWA also completed construction of two pump stations that have provided the ability to pump water from Lake Erie. Since its inclusion, Lake Erie water has proven to be a tremendous asset to our water system. As a result, NEBWA is in compliance with all of the EPA and State water health standards, in a more cost-effective manner.

In addition to water sources, another area of improvement is the continuing effort to upgrade the distribution system. NEBWA has been replacing water mains in the distribution system for many years now and continues to target 1 to 2 water main replacement projects per year. The replacement of older cast iron water mains with larger ductile iron mains not only improves water quality, but also improves fire protection for the community.

Why are there contaminants in my drinking water?

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Educational Language About Contaminants:

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 animal or human activity.

Contaminants that may be present in source water could include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations or 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 agricultural, 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; and

- 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 for consumption, EPA prescribes regulations which limit the amounts of certain contaminants in water that is provided by public water systems and we treat our water according to these EPA's regulations. Similarly, Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Source Water Assessment:

The PA DEP has completed a draft report regarding the susceptibility of our water sources to potential contamination. Additional information on this source water assessment report may be obtained by contacting the PA DEP Northwest Regional Office at 814-332-6899.

How can I get involved or obtain more information?

The public is welcome to attend our regularly scheduled monthly meetings. The Township meets on the first Monday of the Month at 7:30 p.m. and the third Monday of the month at 9:00 a.m. The Township Water and Sewer Authority meets on the fourth Monday of the month at 7:00 p.m. (when necessary).

If you have any questions about this report or your water service, please contact the **North East Township Office, 10300 West Main Road, P.O. Box 249, North East, PA 16428, (814) 725-8606; FAX (814) 725-2419; email: dmiller@northeasttwp.org**

WATER QUALITY DATA TABLE

The North East Borough Water Department and the Township monitors the public water supply for contaminates in your drinking water according to the applicable Federal and State laws. The following table lists all of the drinking water contaminants that we detected during the calendar year of this report. The Township is providing water testing information from both the Borough and the Township so that those interested may be informed about their drinking water. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. In some cases, the Federal (EPA) or the State (PA DEP) requires us to monitor for certain contaminants less than once per year because the concentration of these contaminants does not change frequently.

Important Drinking Water Definitions:

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

Maximum Contaminant Level Goal (MCLG): 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.

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

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

Not Detected (ND): Laboratory analysis indicates that the contaminant is not present at a detectable level.

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

DETECTED CONTAMINANTS

Your Water

Contaminants (units)	MCL	MCLG	Average	Low	High	Violation	Typical Source(s) of Contamination
Inorganic Contaminants							
Fluoride (ppm)	2	2	0.76	0.46	1.28	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer aluminum factories.
EPA's MCL for fluoride is 4 ppm; however, Pennsylvania has set a lower MCL to better protect human health.							
Barium	2	2	0.025	0.025	0.025	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.

Lead and Copper Rule

The Borough was approved for reduced monitoring, allowing them to collect samples every three years. Sampling for lead and copper in 2016 was determined by the state to have been done by using un-approved methods; as a result, both the Borough and the Township re-sampled for copper and lead during 2018, and those results reported here. The next scheduled sampling period begins in 2019.

			Number of Sites above Action Level	90th Percentile Value		
Lead (ppb)v	AL=15	0	0 of 20	< 2.0	No	Corrosion of household plumbing.
>>>>NET Samples	AL=15	0	0 of 10	< 5.0	No	
Copper (ppm)	AL=1.3	1.3	0 of 20	0.17	No	Corrosion of household plumbing.
>>>>NET Samples	AL=1.3	1.3	0 of 10	0.21	No	

Microbiological Contaminants

Turbidity		**Level Found**			
TT=1 NTU For a single measurement	0	.09 NTU	No	Soil runoff.	
TT=at least 95% of monthly Samples ≤ 0.3 NTU	0	100%	No	Soil runoff.	

Total Coliform	MCL	MCLG	Low	High	Violation	
(# of monthly positive samples)	1	0	0	1	No*	Naturally present in the environment.

All required follow up samples were negative.

* *North East Township failed to collect the full five monthly samples during November 2018. Four of the five samples collected were all negative for the presence of total coliform bacteria.*

Contaminants (units)	MCL	MCLG	Average	Range	Violation	Typical Source(s) of Contamination
Disinfection By-Products and Disinfectant Residuals						
TTHMs (Total Trihalomethanes) (ppb)	80	0	39.5 December	23.3 – 59.8	No	By-product of drinking water chlorination.
>>>>NET Samples	80	0	55.6	35.6 – 90.8	No	By-product of drinking water chlorination.
HAA (Haloacetic acids) (ppb)	60	0	26.7 December	17.7 – 33.8	No	By-product of drinking water chlorination.
>>>>NET Samples	60	0	28.1	22.1 – 36.1	No	By-product of drinking water chlorination.

Level Detected is the Highest Running Average during the 2018 year as required

Total Organic Carbon (TOC)

Range of % removal required	Range of % removal achieved	Number of quarters out of compliance	Violation	
25%	8-40%	0	No	Naturally Occurring in the environment.

Alternative Compliance Criteria Used in 2018 <2 in All Samples.

Free Chlorine (ppm)	MRDL	MRDLG	Average	Low	High	Violation	Typical Source(s) of Contamination
Plant	4.0	4.0	1.65	1.33	2.31	No	Disinfection added for control of microbes.
Distribution	4.0	4.0	1.37	0.03	2.06	No	Disinfection added for control of microbes.
>>>>NET Samples	4.0	4.0	0.71	0.19	1.6	No	Disinfection added for control of microbes.

NON-DETECTED CONTAMINANTS

Your Water

Non-Contaminants (units)	MCL	MCLG	Average	Low	High	Violation	Typical Source(s) of Contamination
Inorganic Contaminants							
Arsenic (ppb)	10	0	0	0	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics; production wastes.
Microbiological Contaminants	1	0	0	0	0	No	Nature present in the environment.
Total Coliform (# of monthly positive samples)	1	0	0	0	0	No	Naturally present in the environment.
>>>>NET Samples	1	0	0	0	0	No	Naturally present in the environment.
Volatile Organic Contaminants							
Volatile Organic Chemicals	**		0	0	0	No	Industrial and chemical waste. Gas storage tanks and Landfills.
Inorganic Contaminants							
Nitrite (ppm)	1	1	0	0	0	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate (ppm)	10	10	0	0	0	No	
Synthetic Organic Contaminants including Pesticides and Herbicides							
	***	1	0	0	0	No	Runoff from herbicide used on row crops.

Units Description:

N/A	Not Applicable
ppm	Parts per million or milligrams per liter (mg/L)
ppb	Parts per billion or micrograms per liter (ug/L)
pCi/L	Picocuries per liter (a measure of radioactivity)
NTU	Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water
# of monthly positive samples	Number of samples taken monthly that were found to be positive
ND	Not Detected
TT	Treatment Technique
*	Approved for reduced monitoring. Only one sample per year required
**	MCL for Volatile Organic Chemicals varies for each chemical
***	MCL for Synthetic Organic Contaminants varies for each chemical
>>>>	North East Township Samples

HEALTH EFFECTS AND ADDITIONAL INFORMATION

Turbidity:

Turbidity is a measure of the cloudiness of the water. The Borough monitors it because it is a good indicator of the effectiveness of their filtration system.

Information about 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 North East Borough and Township Water Departments are 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800-426-4791) or *http://www.epa.gov/safewater/lead.*

Information about Nitrate:

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 for advice from your health care provider.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

ESTE INFORME CONTIENE INFORMACION MUY IMPORTANTE SOBRE SU AGUA DE BEBER. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

As demonstrated in the Borough and Township's Test Results Tables, the North East Borough and Township's water did not receive any violations as a result of our water quality in 2018. The Borough, however, did report to have received a minor reporting violation issued by the Pennsylvania Department of Environmental Protection (PA DEP). **It is important to note that the quality and safety of the drinking water was never in question.**

In order to ensure that health standards are met, the Borough and the Township are required to monitor your drinking water for specific contaminants on a regular basis. The Borough reports that one of the sampled parameters, turbidity (which is the measurement of cloudiness in the water that the Borough monitors as a check on the effectiveness of their filtration system), went unmonitored for a two-day period in November due to a brief failure of the monitoring equipment. Due to this failure, they could not guarantee the turbidity value during this period. However, there were no indications of a failure of their filter system and there was no reason to believe that there were any problems with turbidity in that two-day period. The failed equipment was repaired and the turbidity values after the repair indicated that the filter had continued to operate at normal turbidity values.