2018

WATER QUALITY REPORT

PWSID# 5020078

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2018 CONSUMER CONFIDENCE REPORT (CCR)

WE ARE PROUD TO REPORT THAT THE WATER PROVIDED BY THE FINDLAY TOWNSHIP MUNICIPAL AUTHORITY MEETS OR EXCEED ESTABLISHED WATER QUALITY STANDARDS. THIS REPORT CONTAINS VERY IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER.

ESTE INFORME CONTIENE INFORMACION MUY IMPORTANTE SOBRE SU AGUA DE BEBER. TRAUZCALO O HABLE CON ALGUIEN QUE LO ENTIENDA BIEN.

SOURCE(S) OF WATER

FTMA is fortunate to have two independent sources of water supplies. These supplies are provided through interconnects that are maintained between our Authority and the two neighboring Authorities. The main supply utilized by FTMA is with the Municipal Authority of the Township of Robinson (MATR). The second supply is provided by the Moon Township Municipal Authority (MTMA). During this report year, FTMA purchased approximately 98% of our total system needs from MATR, and the remaining 2% was provided from the MTMA system.

The MATR system maintains a raw water intake located on the back channel of the Ohio River. This type of supply is classified as surface water, since it is withdrawn directly from the river prior to entering the Water Treatment Plant. The water enters the intake structure and is pumped to the plant. MATR's current plant capacity is rated at 6 million gallons per day.

MATR began its participation in a Source Water Assessment Program during 2001. The program is designed to assess potential threats to the raw water supply (Ohio River) to contamination in the distribution system, in an effort to ensure its safety and to reduce the cost of water treatment.

The potential sources of contamination for this surface water (MATR) include: accidental pollution from industrial treatment plants, combined sewer overflows, and ruptures of petroleum and gas pipelines. Non-point sources of potential contamination include discharges from recreational and commercial boating. Also, storm water runoff from transportation corridors and from urban / developed areas may lead to contamination.

The MTMA system obtains its water from an alluvium deposit of sand and gravel in the flood plain of, and beneath, the Ohio River. A radial well and two vertical wells are located upstream of the Sewickley bridge along the Ohio River. This type of source is considered a well source. Additional water is withdrawn from the Ohio River by MTMA in a similar manner in which MATR is supplied (surface supply); therefore MTMA's source of supply is classified as a blended supply. (But it is treated as a surface supply.)

The potential sources of contamination for MTMA would be the same as MATR for their surface water plant. A potential spill from the CSX Railroad and PA Route 51 are the primary sources of contamination risk to the MTMA well site. In addition to the two interconnects listed above, FTMA also maintains an emergency interconnect with the Western Allegheny County Municipal Authority (WACMA). This interconnect can be used in the event of an emergency such as a water main break.

PUBLIC COMMENTS

If you have any questions about this report or concerning your water quality, please contact Mr. Jason Orsini, General Manager, at (724) 695-3108. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of the Authority's regularly scheduled meetings. They are held on the fourth Monday of the month at 6:00 p.m. in the main meeting room located at the Municipal Building at 1271 Route 30, Clinton, PA.

MONITORING YOUR WATER

The Findlay Township Municipal Authority routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables indicate the results of our required monitoring for the period of January 1st to December 31st, 2018. 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 is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

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 infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

HOW TO READ THE FOLLOWING TABLES

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

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

Maximum Contaminant Level (MCL) – 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 (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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)
ppb = parts per billion, or micrograms per liter (ug/L)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or pictograms

ppt = parts per trillion, or nanograms per liter

MONITORING COMPLIANCE

During 2018, FTMA had two reporting violations. During the month of May, FTMA collected the 2nd quarterly set of Disinfection Byproducts samples 2 days early, outside of the 3-day window. Samples were required to be taken by May 7th, ± 3 days. Samples were drawn on May 2nd, thus only constituting a reporting violation.

When lead samples were submitted to the analyzing laboratory in 2016, the method used to analyze these samples was not a DEP approved method. Therefore additional lead and copper samples were required to be drawn and tested again once we received notice, which was in 2018. Sample results were returned once again meeting all DEP water quality monitoring requirements.

These did not in any manner constitute a health violation. The water quality of the Authority has met all local, state, and federal guidelines and regulations.

EDUCATIONAL INFORMATION

Drinking water, including bottles 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 EPS's Safe Drinking Water Hotline at 1-800-426-4791 or the internet at www.epa.gov/safewater.

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 materials 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 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 come from gas stations, urban storm water runoff, and septic systems.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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.

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. The Food and Drug Administration regulations establish limits for contaminants in bottles water, which must provide the same protection for public health.

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 line and home plumbing. The Findlay Township Municipal Authority 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, 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.

CONCLUSION

The Findlay Township Municipal Authority has provided you with pertinent information about its public water system, particularly its water quality for the past year. This report was prepared with information provided by the PA Rural Water Association and technical assistance provided by the Allegheny County Health Department. Also included are excerpts taken from MATR's and MTMA's Consumer Confidence Report.

Our goal has always been to provide you, our valued customer and families, with a safe and affordable product. We are grateful to have had the opportunity to serve you in the past and are looking forward to serving you in the future. Again, if you have any questions regarding this report, contact Mr. Jason Orsini at the Authority's office (724) 695-3108.

FTMA 2018 TEST RESULTS

MICROBIOLOGICAL CONTAMINANTS

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	N	0	0	0	>1	Naturally present in the environment

INORGANIC CONTAMINANTS

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected 90th Percentile	Range	MCLG	MCL	Likely Source of Contamination
Copper (ppm) 2018	No	0.076	A	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservative
Lead (ppb) 2018	No	0	A	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits

DISINFECTION BY-PRODUCTS - (STAGE II)

Contaminant (Unit of Measurement)	Violation Yes/No	Highest Annual Average	Range	MCLG	MCL	Likely Source of Contamination
Total Trihalomethanes (ppb)	No	57	22-106	0	80	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	No	23	13-34	0	60	By-product of drinking water chlorination
Chlorine Residual (ppm)	No	1.7	.10-1.7 Annual Avg. 1.00	N/A	MRDL 4	Water additive to control microbes

*Footnote (A) 2018 Results - Of the 33 homes sampled for copper and lead, all results were below the action level.

MTMA 2018 TEST RESULTS

INORGANIC CONTAMINANTS

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm) 2018	No	0.7	(a)	6	6	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm) 2018	No	0.69	(a)	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

MICROBIOLOGICAL CONTAMINANTS

Contaminant (Unit of Measurement)	Violation Yes/No	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Turbidity	No	0.09	.02-.09	0	TT = 1 for a single measurement TT = at least 95% of monthly samples<0.3 NTU	Soil runoff of samples < 0.5 NTU

ORGANIC CONTAMINANTS

Contaminant	Date Tested	Unit	Violation Yes/No	MCL IN CCR UNITS	Range % Removal Achieved	Major Sources in Drinking Water
Total Organic Carbon	2018	Percent Removal	No	TT	27-39% (b)	Naturally present in the environment

Notes: (a) Only one sample was required per monitoring period. (b) TOC quarterly monitoring meets alternative compliance criteria

Regulated Contaminants:

AL=Action Level
MCL=Maximum Contaminant Level
MCLG=Maximum Contaminant Level Goal
MFL=million fibers per liter
MRDL=Maximum Residual Disinfectant Level
MRDLG=Maximum Residual Disinfectant Level Goal
mrem/year=millirems per year (a measure of radiation absorbed by the body)
N/A=Not Applicable

NTU=Nephelometric Turbidity Units (a measure of water clarity)
pCi/l=picocuries per liter (a measure of radioactivity)
ppb=parts per billion, or micrograms per liter (µg/l)
ppm=parts per million, or milligrams per liter (mg/l)
ppq=parts per quadrillion, or picograms per liter
ppt=parts per trillion, or nanograms per liter
TT=Treatment Technique

MATR 2018 Results

Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
Total Coliform Bacteria	TT		TT	N/A	Naturally present in the environment
E. coli	Routine and repeat samples are total coliform-positive and either *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*		Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*	0	Human and animal fecal waste
Turbidity (NTU)	0.02 – 0.08 Range finished water	-	TT	n/a	Soil runoff
Giardia lamblia Viruses Heterotrophic plate count bacteria Legionella *Cryptosporidium*	Surface water treatment = treatment technique Crypto – 0 count raw water			0	Naturally present in the environment
Antimony (ppb)	0	1,000	0	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	0	1,000	0	0	Erosion of natural deposits, mining byproduct.
Asbestos (MFL)	-----	-	-------	7	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	0	-	0	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

MATR 2018 Results

Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
Beryllium (ppb)	0	1,000	0	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	0	1,000	0	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
Chromium (ppb)	0	1,000	0	100	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	0	1,000	0	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	0.49	-	0.49	2	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Mercury (ppb)	0	1,000	0	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nitrate (ppm)	0.78	-	0.78	10.0	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	0.0	-	0.0	1.0	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	0	1,000	0	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppb)	0	1,000	0	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
2,4-D (ppb)	------	1,000	-------	70	Runoff from herbicide used on row crops
2,4,5-TP [Silvex](ppb)	------	1,000	-------	50	Residue of banned herbicide
Acrylamide	------	-	-------	0	Added to water during sewage/wastewater treatment
Alachlor (ppb)	0	1,000	0	0	Runoff from herbicide used on row crops
Atrazine (ppb)	0	1,000	0	3	Runoff from herbicide used on row crops
Benzo(a)pyrene [PAH] (nanograms/l)	0	1,000,000	0	0	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	------	1,000	------	40	Leaching of soil fumigant used on rice and alfalfa

MATR 2018 Results					
Contaminant (units)	**Traditional MCL in mg/L (mg/L = ppm)**	**To Convert for CCR, Multiply by**	**MCL in CCR units**	**MCLG**	**Sources of Contamination**
Chlordane (ppb)	0	1,000	0	0	Residue of banned termiticide
Dalapon (ppb)	0	1,000	0	200	Runoff from herbicide used on rights of way
Di(2-ethylhexyl) adipate (ppb)	0	1,000	0	400	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb) 4/16/2018	0	1,000	0	0	Discharge from rubber and chemical factories
Dibromochloropropane (ppt)	-------	1,000,000	--------	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	-------	1,000	--------	7	Runoff from herbicide used on soybeans and vegetables
Dioxin [2,3,7,8-TCDD] (ppq)	--------	1,000,000,000	--------	0	Emissions from waste incineration and other combustion; Discharge from chemical factories
Diquat (ppb)	0	1,000	-------	20	Runoff from herbicide use
Endothall (ppb)	0	1,000	-------	100	Runoff from herbicide use
Endrin (ppb)	0	1,000	0	2	Residue of banned insecticide
Epichlorohydrin	-------	-	-------	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals
Ethylene dibromide (ppt)	-------	1,000,000	--------	0	Discharge from petroleum refineries
Glyphosate (ppb)	0	1,000	--------	700	Runoff from herbicide use
Heptachlor (ppt)	0	1,000,000	0	0	Residue of banned pesticide
Heptachlor epoxide (ppt)	0	1,000,000	0	0	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1,000	0	0	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	0	1,000	0	50	Discharge from chemical factories
Lindane (ppt)	0	1,000,000	0	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	0	1,000	0	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock

MATR 2018 Results					
Contaminant (units)	**Traditional MCL in mg/L (mg/L = ppm)**	**To Convert for CCR, Multiply by**	**MCL in CCR units**	**MCLG**	**Sources of Contamination**
Oxamyl [Vydate] (ppb)	0	1,000	--------	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Pentachlorophenol (ppb)	-------	1,000	--------	0	Discharge from wood preserving factories
Picloram (ppb)	-------	1,000	--------	500	Herbicide runoff
PCBs [Polychlorinated biphenyls] (ppt)	--------	1,000,000	--------	0	Runoff from landfills; Discharge of waste chemicals
Simazine (ppb)	0	1,000	0	4	Herbicide runoff
Toxaphene (ppb)	-------	1,000	--------	0	Runoff/leaching from insecticide used on cotton and cattle
Benzene (ppb)	0	1,000	0	0	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	0	1,000	0	0	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	0	1,000	0	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	0	1,000	0	600	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	0	1,000	0	75	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	0	1,000	0	0	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	0	1,000	0	7	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	0	1,000	0	70	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	0	1,000	0	100	Discharge from industrial chemical factories
Dichloromethane (ppb)	0	1,000	0	0	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	0	1,000	0	0	Discharge from industrial chemical factories
Ethylbenzene (ppb)	0	1,000	0	700	Discharge from petroleum refineries
Styrene (ppb)	0	1,000	0	100	Discharge from rubber and plastic factories; Leaching from landfills
Toluene (ppm)	0	-	0	1	Discharge from petroleum factories

MATR 2018 Results					
Contaminant (units)	**Traditional MCL in mg/L (mg/L = ppm)**	**To Convert for CCR, Multiply by**	**MCL in CCR units**	**MCLG**	**Sources of Contamination**
Tetrachloroethylene (ppb)	0	1,000	0	0	Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	0	1,000	0	70	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	0	1,000	0	200	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	0	1,000	0	3	Discharge from industrial chemical factories
Trichloroethylene (ppb)	0	1,000	0	0	Discharge from metal degreasing sites and other factories
Vinyl Chloride (ppb)	-------	1,000	-------	0	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	0	-	0	10	Discharge from petroleum factories; Discharge from chemical factories
Beta/photon emitters (mrem/yr)	-------	-	--------	0	Decay of natural and man-made deposits
Alpha emitters (pCi/l)	-------	-	-------	0	Erosion of natural deposits
Combined radium (pCi/l)	---------	-	-------	0	Erosion of natural deposits
Uranium (pCi/L[1])	--------	-	--------	0	Erosion of natural deposits
Lead (ppb) 2016 results Testing due in 2019	.002 (90 percentile)	1,000	2	15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm) 2016 results Testing due in 2019	.052 (90 percentile)	-	.052	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
TTHMs [Total trihalomethanes] (ppb)	0.018-0.087 Range	1,000	18-87	80	By-product of drinking water chlorination
Haloacetic Acids (HAA) (ppb)	0.013-0.040 Range	1,000	13-40	60	By-product of drinking water disinfection
Bromate (ppb)	-------	1,000	-------	0	By-product of drinking water chlorination
Chlorite (ppm)	-------	-	-------	0.8	By-product of drinking water chlorination
Chlorine (ppm)	MRDL = 2.25	-	MRDL = 2.25	MRDLG = 4.0	Water additive used to control microbes

[1] If lab reports value in pCi/L, convert to µg/L using the following formula: ____pCi/L X 1.49 = _____ µg/L

MATR 2018 Results					
Contaminant (units)	**Traditional MCL in mg/L (mg/L = ppm)**	**To Convert for CCR, Multiply by**	**MCL in CCR units**	**MCLG**	**Sources of Contamination**
Chloramines (ppm)	Not used	-		MRDLG = 4.0	Water additive used to control microbes
Chloride dioxide (ppb)	Not used	1,000		MRDLG = 800	Water additive used to control microbes
Total organic carbon (ppm)	44.4%-52.7 % removal	-	% removal	35% removal required	Naturally present in the environment

DETECTED SAMPLE RESULTS TABLES

Chemical Contaminants Table (For Inorganics, Organics, Radionuclides and Disinfectants/Disinfection Byproducts):

Contaminants that Do Not Require a Conversion	
The following *Table 1* contaminants are contaminants that do not require conversions for the *Level Detected* column values because their MCL, MRDL, or action level values are whole numbers:	
Barium	Alpha emitters
Fluoride	Beta emitters
Nitrate	Combined radium
Nitrite	Chlorite
Toluene	Chlorine
Xylene	Chloramines
Copper	