THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF ROBINSON
4200 Campbells Run Road
Pittsburgh, PA 15205-1304

2018-CONSUMER CONFIDENCE REPORT ("CCR")
PWS – ID#5020045

The Municipal Authority of the Township of Robinson ("MATR") is pleased to present our annual report concerning the quality of your drinking water. MATR is committed to providing our customers with a safe, dependable and plentiful supply of high-quality drinking water. The water produced and delivered by MATR continues to meet or exceed State and Federal requirements.

Este informe contiene informacion muy imporante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it or speak to someone who understands it.)

MATR is a member of the Partnership for Safe Water formed and administered by a number of national water organizations in cooperation with the United States Environmental Protection Agency (USEPA) and the Pennsylvania Department of Environmental Protection. This voluntary program's mission is to maximize water treatment effectiveness beyond what the Safe Drinking Water regulations require. This collaborative experience will assist us meeting our goal of providing continuous improvement of our water system operations in serving our customers.

The Authority has committed to the enhancement of drinking water quality and operational excellence in water treatment. By making this commitment, the member utilities treatment practices will under go a rigorous review developed by national experts and include a four – phase, self-assessment and peer review process.

In 2016 MATR established and implemented a Source Water Protection Program ("S.W.P.P.") to address the moderate risk of significant contamination. With the help of the River Alert Information Network ("RAIN") and a grant from the Pennsylvania Department of Environmental Protection ("DEP"), MATR was able to create and implement the S.W.P.P. at no cost to MATR rate payers. The plan is designed to assess potential sources of contamination to our raw water supply (Ohio River), ensure the safety of the source and reduce the cost of water treatment. The plan was established in conjunction with four (4) other water Authorities that use the Ohio River as their raw water source. A copy of the plan can be reviewed at our office during normal business hours or on our website http://www.robinsonwater.com/.

The potential sources of contamination for this surface water source include accidental pollution from industrial treatment plants, combined sewer overflows, and rupture 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.

WHERE YOUR WATER COMES FROM

MATR obtains its water supply from the back channel of the Ohio River at a point 12,000 feet downstream of the Emsworth Dam and 200 feet upstream from the confluence of Moon Run and the Ohio River. Intake lines located 12 feet below the river's normal pool of 692 feet deliver raw water to an intake structure where it is pumped to the water treatment plant. In 2018, the average daily withdrawal from the river was 3.08 million gallons per day. MATR's plant is currently

capable of treating 6 million gallons of water per day. Treatment consists of three separate processes: (i) clarification, during which silt and clay are removed; (ii) filtration, where sand and gravel filters remove fine particles and microorganisms and (iii) disinfection, when chlorine is added to ensure the removal of any remaining harmful microorganisms. Additionally, during the treatment process, activated carbon is added to enhance the taste of the water and fluoride is added to prevent cavities in children's teeth.

After the water is treated, it is pumped from the plant into the water distribution system for delivery to our customers. The water that is not consumed on a given day is stored in one of the Authority's three storage tanks, which provide for both peak water demand and fire protection.

DESCRIPTION OF THE AUTHORITY'S WATER SYSTEM

The existing water distribution system facilities include about 107.2 miles of water lines ranging in size up to thirty inches, and related facilities including two elevated water tanks, which store one million gallons and one and one-half million-gallons. The Authority also has a 500,000-gallon standpipe. Additionally, the Authority maintains three metered connections with the system of Pennsylvania-American Water Company, three booster-pumping stations to pump water from the Pennsylvania-American Water System, two metered connections with Moon Township Municipal Authority, two metered connections with the Western Allegheny Municipal Authority, a connection with the Coraopolis Water and Sewer Authority and a interconnect to provide water to the Municipal Authority of the Borough of West View. Line sizes are predominantly six-inch, eight inch and ten-inch diameter.

The water supply system services all of the Township of Robinson and, provides not less than 85% of Findlay Township Municipal Authority's daily water requirements.

DISTRIBUTION SYSTEM OPTIMIZATION – EPA FIELD STUDY

MATR continues to implement the recommendations from the EPA Distribution Optimization study conducted In September 2008 to reduce the Trihalomethane and Halocetic Acid formation. MATR in conjunction with EPA and DEP engaged in a voluntary field study in an effort to improve drinking water quality beyond compliance levels and to enhance public health protection. One of the main objectives of the field event was to help review existing chlorine residual throughout the distribution system in an effort to assess meeting current Total Trihalomethane and Halocetic Acid levels and to prevent future exceedances of these levels mandated by the Disinfection by Products Rule.

WATER QUALITY CONTAMINANTS AND MONITORING

Water in its movement above and below ground is capable of dissolving common minerals and, where available, radioactive materials. In addition, water can absorb and dissolve substances resulting from animal or human activity.

Typical contaminants found in the Ohio River or raw water includes:

- Microbial contaminants, such as disease-causing viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

- Inorganic chemical 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, 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, 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.

The United States Environmental Protection Agency (USEPA) established regulations and standards to ensure that public water is safe to drink. MATR tests contaminants in the raw water source to enable adjustments to be made in the treatment process to minimize or eliminate those pollutants. As treatment progresses, additional tests are run to optimize the process, followed by the analyses of finished water from the plant (see Appendix Table 1) and various locations in the distribution system. Furthermore, the Pennsylvania Department of Environmental Protection (Pa DEP) performs filter plant performance evaluations every three (3) years. During this time their representatives monitor our overall plant operation and maintenance, filter process effectiveness, and personnel. Finished water samples are collected and sent to a certified laboratory for analysis of cryptosporidium and giardia, intestinal parasites common in raw water. These contaminants may be harmful to people with weakened immune systems (see Educational Information Page 6).

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. MATR is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. For further information about Lead in Drinking Water, please see our website link is at the end of this report.

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 1 – (800 – 426 – 4791) or https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline

UNREGULATED CONTAMINANT MONITORING

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water to determine whether future regulation is warranted.

As part of the Unregulated Contaminant Monitoring Rule (UCMR), the Authority performed monitoring for the unregulated contaminants identified by EPA, for 4-four consecutive calendar quarters. None of the unregulated contaminants was detected in our drinking water.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water (Ohio River). Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individual can overcome the disease within a few weeks. However, people with a low immune system are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take, to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water. MATR is required by the EPA and DEP to sample our raw water for Cryptosporidium and Giardia monthly, starting October 2016 until October 2018. Our monitoring for 2018 found no presence of these organisms in our source water for each of the first three (3) months sampled in 2018.

INTERCONNECTIONS/SOURCE WATER ASSESSMENT

MATR has potable interconnections with the following public water systems.

1. Pennsylvania American Water Company (PAWC) – Three (3) locations
2. Moon Township Municipal Authority (MTMA) – Two (2) locations
3. Western Allegheny County Municipal Authority (WACMA) – Two (2) locations
4. Coraopolis Water and Sewer Authority (CWSA) – One (1) location
5. Municipal Authority of the Borough of West View (MABWV) – One (1) location

These systems are utilized in the event that sufficient quantities of potable water are not available for our customers. Pertinent information on the quality of these suppliers is available from their Consumer Confidence Reports.

DEFINITIONS

The CCR includes definitions of key terms that consumers will need to understand the contaminant data in Appendix Table 1.

In the 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:

- 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 (mg/l) – 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.

- Millirems per year (mrem/yr) – measure of radiation absorbed by the body.

- Nephelometric Turbidity Unit (NTU) – nephelometric turbidity unit is a measure of the clarity of water.

- Maximum Contaminated 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 MCLG's 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 contamination.

- Minimum Residual Disinfection Level (MRDL) – The minimum level of residual disinfectant required at the entry point to the distribution system.

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

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

MONITORING COMPLIANCE:

During 2018 the Authority met all safe drinking water standards and performed all the required monitoring events. All samples were collected within the required monitoring periods. Except for Total Coliform Presence November 2018. MATR was required to collect twenty (20) samples during the November 2018 monitoring period. MATR collected only nineteen (19) samples, this triggered a Notice of Violation (NOV) requiring MATR to do a Public Notification (PN) and let the public know that we collected nineteen (19) samples and should have collected twenty (20) samples.

WHAT SHOULD I DO? / There is nothing you need to do at this time.

Please share this information and the Public Notification (PN) with all the other people that drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses) You can do this by posting this information in a public place or distributing copies by hand, mail, or email.

EDUCATIONAL INFORMATION

SOME PEOPLE MAY BE MORE VULNERABLE TO CONTAMINANTS IN DRINKING WATER THAN THE GENERAL POPULATION. IMMUNE – 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 INFECTION. 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.

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 heath risk. More information about contaminants and potential health effects can be obtained from the Center for Disease Control and Prevention at 1-800-232-4636 or http://www.cdc.gov/healthywater/drinking/public/water_diseases.html

CONCLUSION

We are grateful for the opportunity to provide you with clean, quality drinking water. In order to maintain a dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements typically require us to increase the rates we charge for service. Thank you for your understanding. Currently our rates for water service are below the norm of area water suppliers (see our website for actual data).

MATR has provided you with significant information about its water quality for the past calendar year. We direct your attention to the attached Appendix A of contaminants monitored by MATR during that period. We encourage your review of the data and invite inquiries about any part of this report. Should you have any questions concerning the report, you are encouraged to contact Joseph Alvarez III, Manager – Water Systems Operations at (412) 923-2411 (Ext. #14).

Public participation in decisions about our drinking water is encouraged at our Board meetings, which are held the second Wednesday of each month at the MATR office located at 4200 Campbells Run Road Pittsburgh, PA 15205. The office's mailing address is 4200 Campbells Run Road, Pittsburgh, PA 15205-1304. Our most recent CCR is always posted on our website: http://www.robinsonwater.com

The CCR's for all water systems in Allegheny County can be found at the DEP website: http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4492

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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

TABLE 1

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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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
Beryllium (ppb)	0	1,000	0	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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
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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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
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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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
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

TABLE 1					
Contaminant (units)	Traditional MCL in mg/L (mg/L = ppm)	To Convert for CCR, Multiply by	MCL in CCR units	MCLG	Sources of Contamination
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

TABLE 1					
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	

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