#### **MOON**

# TOWNSHIP MUNICIPAL AUTHORITY



## **2011 Water Quality Report**

This report is designed to inform you about the quality of water and the service we deliver to you every day. Our constant goal is to provide you with a dependable supply of excellent quality drinking water that meets or exceeds all federal and state requirements.

The Moon Township Municipal Authority (MTMA) water supply is obtained from an alluvium deposit of sand and gravel in the flood plain of and beneath the Ohio River and from the Ohio River. A radial well, two vertical wells and a surface water intake are located along the southern bank of the Ohio River. The treatment facility is operated to provide very reliable treatment of a blend of groundwater and surface water.

In 2009, the PA Department of Environmental Protection (PADEP) approved the Source Water Protection Plan of our three (3) groundwater wells and surface water supply. These provide water to the MTMA Water Filtration Plant. The assessment has found that our sources are potentially susceptible to a spill from the CSX Railroad and PA Route 51 as the primary sources of contamination risk. Copies of the complete report are available for review at the PADEP Pittsburgh Regional Office or on the PADEP website at www.dep.state.pa.us (Keyword: "DEP source water").

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Municipal Authority meetings occur on the third Wednesday of each month, at 7:00 p.m. in the second floor meeting room at the Moon Township Community Service Center 1700 Beaver Grade Road. The public is welcome.

We are pleased to report that our drinking water meets or exceeds all federal and state requirements. MTMA (Public Water Supply # 5020011) routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following pages shows the results of monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2011. As you can see by the data table, our system had no water quality violations for 2011. In November 2011, we monitored for Ethylene Dibromide (EDB), However, through no fault of the MTMA, the results were reported later than the required due date to the DEP by our contracted lab. There is nothing we need to do. The quality of your drinking water was not compromised at any time.

All sources of drinking water are subject to potential contamination, either naturally occurring or manmade. Contamination of a ground water supply may occur as a result of a transportation or industrial spill on land near the area of the wells. Wellhead protection practices are in place to reduce the potential for groundwater contamination. Surface water contamination may result from a spill reaching the Ohio River or one of its tributaries. In the event of surface water contamination, the system can utilize 100% well water until the river contamination has cleared.

If you have any questions about this report or concerning your water utility, please contact John Riley, MTMA General Manager, at 412-264-4300 ext. 14 between the hours 8 a.m. and 5:00 p.m.

John J. Wink President In the following tables you will find many terms and abbreviations you might not be familiar. To help you better understand these terms, we have 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.

Parts per million (PPM) or milligrams per liter - 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.

Oocysts per liter (Ooc/L) - A measure of the cryptosporidium in water.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" 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 (MCLG) - The "Goal" 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.

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.

#### NA - Not Applicable

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.

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

Less Than (<) This sign indicates that the sample result was below that number. It usually indicates that the result was below the detection level for that parameter.

### WATER QUALITY TABLE

Microbiological Contaminants										
Contaminant	Year	Unit	Violation	MCL IN	MCLG	Detected	Range	Major Sources in Drinking Water		
	Tested		Yes\No	CCR UNITS		Level				
Turbidity	2011	NTU	No	TT = 1 for a single measurement	0	.12	.0112			
				TT = at least 95% of monthly samples <0.3 NTU		100 %	(a)	Soil erosion and run off		

<b>Inorganic Contaminants</b>										
Contam- inant	Year Tested	Unit	Violation	MCL IN CCR	MCLG	Detected Level	Range	Major Sources in Drinking Water		
Fluoride	2011	PPM	Yes\No No	UNITS 4	4	.7	(b)	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories		
Copper	2010	PPM	No	AL= 1.3	1.3	0	02 (c)	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead	2010	PPM	No	AL= 15	0	0	0 - 9 (c)	Corrosion of household plumbing systems; Erosion of natural deposits		
Chlorine	2011	PPM	No	4	4	.92	.5192 (d)	Added as a disinfectant to control microbes		
Chlorine	2011	PPM	No	4	4	.6	.6096 (e)	Added as a disinfectant to control microbes		

Organic Contaminants										
Contaminant	Year Tested	Unit	Violation Yes\No	MCL IN CCR UNITS	MCLG	Detected Level	Range			
Trihalomethanes (TTHM)	2011	PPB	No	80	NA	54	20 – 96			
HaloaceticAcids (HAA5)	2011	PPB	No	60	NA	11	1 – 24			

Contaminant	Year Tested	Unit	Violation MCL IN Yes\No CCR		_		Major Sources in Drinking Water
				UNITS	Required	Achieved	
Total Organic		Percent				28.3 – 35.5%	Naturally present
Carbon	2011	Removal	No	TT	NA - 35%	(f)	in the environment.

#### FOOTNOTES:

- (a) TT = 95% of all monthly samples taken must be equal or less than .5 NTU. 100% of all monthly samples tested were less than 0.3 NTU.
- (b) Only one sample was required per monitoring period.
- (c) Thirty two (32) homes were sampled. All samples were below the action limit.
- (d) The detected level is the highest monthly average chlorine residual in the distribution system.
- (e) The detected level is the lowest entry point chlorine residual leaving the water plant.
- (f) TOC First quarter monitoring meet alternative compliance criteria.

If present, elevated levels of lead can cause serious health problems, especially for pregnant and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. MTMA 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 drink water or cooking. If you are concerned about lead in your water, you may wish to have your water tested. In formation 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 hhtp://www.epa.gov/safewater/lead.

All sources of drinking water are subject to potential contamination, either naturally occurring or manmade. Contaminants that may be present include: microbial contaminants such as bacteria and viruses; inorganic contaminants such as salts and metals; pesticides and herbicides and organic chemical contaminants including synthetic and volatiles organic chemicals.

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

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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

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/Centers for Disease Control (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.