

MEDINA COUNTY SOUTHERN WATER DISTRICT
PWS ID #: OH5260712
2011 CONSUMER CONFIDENCE REPORT

The U.S. Environmental Protection Agency (EPA) has adopted rules which require all water suppliers to annually provide information on the quality of water supplied to customers. Medina County, your drinking water provider, has prepared this Consumer Confidence Report in order to meet these requirements and to inform you of the quality of water you are receiving. This report indicates that the water the County has been providing to you meets all requirements adopted by the U.S. EPA. The Medina County Chippewa Lake Water Plant obtains its water from three wells located at 7090 Lake Rd. The Westfield Water Plant obtains its water from two wells located west of the Village and one on Westfield Road. In addition, there are also two emergency water supply connections to the County's Northwest Water System. The Chippewa Lake connection was used for five days in June. The Westfield connection was used for 3 days in August, and for two days in September.

For more information about this report, or for any questions relating to your drinking water, please call Dave Ling, Water Distribution Systems Supervisor, at (330) 723-9585.

Community Participation

The Medina County Board of Commissioners holds regularly scheduled meetings every Monday at 9:30 a.m. at the County Administration Building, 144 N. Broadway, Medina. Information regarding these meetings can be found on the Commissioners Web site at <http://www.co.medina.oh.us/commiss/agenda.htm>. The public may also address any drinking water concerns to the Medina County Sanitary Engineer's Superintendent of Treatment, Dave Bazilevich, at (330) 723-9585.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/hotline/.

Substances That Could Be in Water

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water 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 may result from urban stormwater 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 stormwater runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead and Drinking Water

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. Medina County is responsible for providing high quality drinking water, but cannot control contaminants that may be contributed to the water through the variety of materials used in plumbing components. When your water has been sitting for several hours, metals from these fixtures can leach into your water. 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.

Operating License

Medina County currently has a unconditioned license issued by the Ohio EPA to operate The Medina County Southern water system.

Source Water Assessment

The Ohio EPA recently completed a study of the Chippewa Lake System wells in an attempt to identify any potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water-rich zone) that supplies water to the County's Chippewa Lake System has a moderate susceptibility to contamination. This susceptibility rating means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is moderate, not the existence of contamination.

The aquifer from which Westfield draws water has a high susceptibility to contamination. This does not mean the water supply will become contaminated, only that conditions are such that ground water could be impacted by potential contaminant sources. Therefore, Medina County has developed a Wellhead Protection Plan to protect the ground water supply from potential contamination.

Detailed information is provided in the Source Water Assessment Report, which can be obtained by calling the Medina County Sanitary Engineers at 330-723-9585.

Some things that customers can do to protect the drinking water supply is to dispose of the following chemicals properly: cleaning products, auto products, fuel oil, furniture strippers, lawn and garden products, and oil-based paints. Customers should not dispose of these in sinks, toilets or storm drains. Storm drains transmit water and pollutants directly to the ground or streams.

Contaminant Monitoring Results

Chippewa Plant

Contaminant	Amt. Detected	Range Low-High	MCL (Highest Level Allowed)	MCLG (Health Goal)	Possible Health Effects	Potential Source of Contamination	Violation	Sample Year
Nitrate (ppm)	0.25	N/A	10	10	Methemoglobinemia (Blue Baby Syndrome)	Natural deposits, fertilizers, sewage	No	2011

Joint Distribution

Contaminant	Amt. Detected	Range Low-High	MCL (Highest Level Allowed)	MCLG (Health Goal)	Possible Health Effects	Potential Source of Contamination	Violation	Sample Year
TTHMs (ppb) (Total Trihalomethanes)	44.4	38-50.7	80	NA	Some people who drink water containing trihalomethanes in excess of the MCL over many years may have and increased risk of getting cancer	By-product of drinking water chlorination	No	2011
HAA5's (Haloacetic Acids)(ppb)	13.2	8.3-18.0	60	NA	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have and increased risk of getting cancer	By-product of drinking water chlorination	No	2011
Total Chlorine (ppm)	1.22	.24-3.61	4	4	Some people who use drinking water containing chlorine well in excess of EPA's standards could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of EPA's standard could experience stomach discomfort.	Water additive used to control microbes	No	2011

IDSE Sampling

Contaminant	Amt. Detected	Range Low-High	MCL (Highest Level Allowed)	MCLG (Health Goal)	Possible Health Effects	Potential Source of Contamination	Violation	Sample Year
IDSE TTHMs (ppb)	NA	17.0-23.7	NA	NA	Some people who drink water containing trihalomethanes in excess of the MCL over many years may have and increased risk of getting cancer	By-product of drinking water chlorination	No	2010
IDSE HAA5's (ppb)	NA	<6.0-6.0	NA	NA	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have and increased risk of getting cancer	By-product of drinking water chlorination	No	2010

Under the Stage 2 Disinfectants/Disinfection By-products Rule (D/DBPR), our public water system was required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection by-product concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR beginning in 2012. Disinfection by-products are the result of providing continuous disinfection of your drinking water and from when disinfectants combine with organic matter naturally occurring in the source water. Disinfection by-products are grouped into two categories: Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA%). The U.S. EPA sets standards for controlling the levels of disinfectants and disinfectant by-products in drinking water, including both TTHMs and HAA5s.

Contaminant	Amt. Detected 90 th percentile	Range Low-High	MCL (Highest Level Allowed)	MCLG (Health Goal)	Possible Health Effects	Potential Source of Contamination	Violation?	Sample Year
Tap water samples were collected for lead and copper analyses from sample sites throughout the community								
Copper (ppb)	250	55-454	1300	1300	Gastrointestinal distress, liver or kidney disease	The major sources of copper in drinking water are corrosion of household plumbing systems; and erosion of natural deposits.	No	2011
Lead (ppb)	<5.0	<5.0-<5.0	15	0	Delayed physical or mental development in children, adults could develop kidney problems or high blood pressure	The major sources of lead in drinking water are corrosion of household plumbing systems; and erosion of natural deposits.	No	2011

Westfield Plant

Contaminant	Amt. Detected	Range Low-High	MCL (Highest Level Allowed)	MCLG (Health Goal)	Possible Health Effects	Potential Source of Contamination	Violation?	Sample Year
Haloacetic Acids (HAA5)(ppb)	1.6	NA	NA	60	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have and increased risk of getting cancer	Byproduct of drinking water chlorination	No	2006
Fluoride (ppm)	0.32	NA	4	4	Exposure to excessive consumption of fluoride over a lifetime may lead to increased likelihood of bone fractures in adults, and may result in effects on bone leading to pain and tenderness. Children aged 8 years and younger exposed to excessive amounts of fluoride have an increased chance of developing pits in the tooth enamel, along with a range of cosmetic effects to teeth.	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	No	2009
Xylenes (ppb)	0.850	NA	10000	10000	Some people who drink water containing xylenes well in excess of the maximum contaminant level (MCL) for many years could experience damage to their nervous system.	Discharge from petroleum factories. Discharge from chemical factories	No	2010

Definitions

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

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

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.

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.

MRDLG (Maximum Residual Disinfectant 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.

NA: Not applicable

ND (Not Detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

Ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

Ppm (parts per million): One part substance per million parts water (or milligrams per liter).

Removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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