

Augusta Charter Township
Pittsfield Charter Township
Superior Charter Township
City of Ypsilanti
Charter Township of Ypsilanti
Southwest Canton Charter Township

DRINKING WATER QUALITY REPORT for 2005

KEEPING YOU INFORMED!

The Ypsilanti Community Utilities Authority (YCUA) provides your drinking water and is pleased to present you with this eighth annual water quality report. This report follows the guidelines set by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ). Our goal is to provide you with a safe and dependable water supply. This report will illustrate that we are achieving this.

SOURCE WATER ASSESSMENT

YCUA obtains your drinking water from the Detroit water system. Your source water comes from the Detroit River, situated within the Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, in the U.S. and parts of the Thames River, Little River, Turkey Creek and Sydenham watersheds in Canada. The MDEQ, in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department (DWSD), and the Michigan Public Health Institute performed a source water assessment to determine its susceptibility to potential contamination. Susceptibility was rated on a seven-tiered scale from very low to very high based primarily on geologic sensitivity, water chemistry, and contaminant sources.

Even though DWSD's source water intakes were found to be highly susceptible to potential contamination, DWSD has historically met State and Federal drinking water standards. In addition, DWSD has an emergency response management plan in place, and is developing a source water protection program. Some source water protection activities have already been initiated: these include industrial pre-treatment, street cleaning, and mercury reduction.

If you would like to know more about the Source Water Assessment, please visit the Detroit Water and Sewerage Department's (DWSD's) website at www.dwsd.org or contact Mary Lynn Semegen, 313.935.7106, semegen@dwsd.org.

Ypsilanti Community Utilities Authority

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Dedicated to Providing Top Quality, Cost Effective, and Environmentally Safe Water and Wastewater Services to Our Customers

2005 WATER SYSTEM IMPROVEMENTS

All communities performed routine hydrant flushing and valve exercising to ensure system reliability.

Township and City of Ypsilanti:

- **Water Main Replacements:** Replaced approximately 1825 feet of aging water main on First and Warner Avenues between Michigan Avenue and Harriet Street in conjunction with City road improvements.
- **DDA Parking Lots Water Main Improvements:** Replaced old, undersized water main with approximately 1,200 feet of new pipe in the City parking lots and alleys between Huron Street and Washington Street both north and south of Michigan Avenue. Work was completed in conjunction with City road improvements.
- **Textile Road Water Main Replacement:** Approximately 3,300 feet of aging water main was replaced on Textile Road between Bunton Road and Colony Park Way. Work was completed in conjunction with a developer's road and storm sewer improvements.
- **Huron River Drive Water Main Relocation:** Approximately 200 feet of water main was relocated on Huron River Drive just east of Whittaker Road. Work was completed in conjunction with a County road realignment project.

Augusta Charter Township

- **Looping Main and Second Connection to YCUA:** Work to loop the new second connection to YCUA into Augusta Charter Township's main connection continued. This will result in greater reliability. Looping will continue as new developments are constructed.

Pittsfield Charter Township

- **Completion of the Textile Road Booster Station:** This new 5,000 square foot station houses six, 150 horse power pumps to boost drinking water from an adjacent five million gallon ground storage tank. This booster station has the ability of delivering up to 7,500 gallons per minute (gpm), with future expansion capabilities for an additional 2,500 gpm.

Superior Township

- **Section #36 Utility Improvements:** 5,500 feet (1.04 miles) of twelve inch water main was installed as part of a larger utility improvements project to serve land parcels in Section 36 of the Township's water and sewer district.
- **New Booster Station/Third YCUA Water Connection:** The construction of a third water connection and booster station at the intersection of Clark and LeForge Roads began in 2005 and is near completion. This will meet increasing demands for water service and provide adequate pressure for fire protection.

HEALTH and SAFETY INFORMATION

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk.

The sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive materials, and can also pick up substances resulting from animal or human activity. Contaminants 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, and wildlife
- *Inorganic contaminants*, such as salts and metals, which can be naturally occurring, or result from urban 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 also come from gas stations, septic systems, and urban or agricultural runoff (i.e., pesticides and herbicides)
- *Radioactive contaminants*, which can be naturally occurring or the result of oil and gas production and mining activities

Based on the results of the 2005 testing (see table at right), all of these contaminants were below the level of concern in your water. To ensure that tap water is safe, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration is in the process of establishing limits for contaminants in bottled water, which must provide the same protection for public health.

Information for People with Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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. Federal guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are also available from the EPA's Safe Drinking Water Hotline, 800.426.4791.

DEFINITIONS

Parts per million (ppm) and parts per billion (ppb) - One ppm can be equated to four teaspoons of salt in a standard 24-foot backyard pool. One ppb is one teaspoon of salt in an Olympic-sized pool.

Maximum Contaminant Level Goal (MCLG) - The MCLG is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs provide for a margin of safety.

Maximum Contaminant Level (MCL) - The MCL is the highest level of a contaminant that is allowed in the drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology. MCLs are set at very stringent levels by the State and Federal governments. To understand the possible health effects, a person would have to drink about two liters (quarts) of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the associated health effect.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of 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.

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.

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

Nephelometric Turbidity Unit (ntu) - Measures drinking water clarity.

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

TTHM - Total Trihalomethanes.

na - Not applicable.

More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 800.426.4791



YCUA WATER QUALITY TEST RESULTS FOR 2005

Your drinking water is continuously monitored above and beyond Federal and State laws. The table below lists all of the contaminants detected in your drinking water during calendar year 2005. Lead, copper and bacteriological monitoring is performed by each individual community. There were no bacteriological detects during 2005. All other results are for the entire YCUA service area. The presence of contaminants in the water does not necessarily indicate a health risk. This table does not show the hundreds of other contaminants tested for, but not found in your drinking water. **The test results confirm that your drinking water meets or surpasses all Federal and State requirements, and that ALL DETECTED CONTAMINANTS ARE BELOW ALLOWED LEVELS. THERE WERE NO VIOLATIONS.**

Regulated Inorganic Parameters (annual monitoring at plant finished water taps)

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
Fluoride	2005	ppm	0.94	na	na	4	4	Water additive to promote strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate	2005	ppm	0.38	na	na	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Regulated Disinfectant Residuals and Disinfection By-Products (sampled in the distribution system)

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
TTHMs	2005	ppb	24.5	8.1	36.3	na	80	By-products of drinking water chlorination
Haloacetic Acids	2005	ppb	18.0	4.7	17.1	na	60	By-products of drinking water chlorination
Chlorine Residual	2005	ppm	0.68	0.53	0.77	MRDLG=4	MRDL=4	Water additive used to control microbes

Regulated Microbiological Parameters (monitored every 4 hours at the plant taps)

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
Turbidity	2005	ntu	na	na	0.20	na	TT	Soil runoff

Turbidity measures the cloudiness of water. The rules state that turbidity must never exceed 1.0 NTU, and must not exceed 0.3 NTU in more than 95% of daily samples in any single month. 100% of our samples were below 0.3 NTU.

Regulated Total Organic Carbon (TOC) Removal

The TOC removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. During 2005, TOC was measured each month and because the level was low, there was no requirement for TOC removal. The major source of TOC in drinking water is the erosion of natural deposits.

Individual Community Regulated Copper and Lead Testing (sampled at individual taps)

contaminant	test date	unit	90th	samples >AL	MCLG	MCL	likely sources
Charter Township of Ypsilanti, City of Ypsilanti, Southwest Canton Charter Township							
Lead	2005	ppb	5	0	0	AL=15	The likely sources of both lead and copper are the corrosion of household plumbing and erosion of natural deposits.
Copper	2005	ppm	0.181	0	1.3	AL=1.3	
Superior Charter Township							
Lead	2005	ppb	2	0	0	AL=15	
Copper	2005	ppm	0.027	0	1.3	AL=1.3	
Pittsfield Charter Township							
Lead	2005	ppb	0	0	0	AL=15	
Copper	2005	ppm	.0565	0	1.3	AL=1.3	
Augusta Charter Township							
Lead	2005	ppb	6	0	0	AL=15	
Copper	2005	ppm	0.559	0	1.3	AL=1.3	

Lead and Copper compliance is based on the 90th percentile, where nine out of ten samples must be below the Action Level (AL).

UNREGULATED PARAMETERS (No established EPA drinking water standards)

contaminant	test date	unit	level found	likely sources
Sodium	2005	ppm	4.63	Erosion of natural deposits

This information is provided for those concerned with sodium in their diet. 4.63 ppm of sodium equates to about 1.1 milligrams of sodium per 8 ounce glass of water.

GENERAL INFORMATION ABOUT YCUA

YCUA staff works around the clock to provide you with a reliable supply of water. If you have questions about the YCUA water system, please contact Jeff Castro, Water Distribution Supervisor, at jcastro@ycua.org or 734.484.4600 extension 305.

Additional information about YCUA is available on our web site at www.ycua.org. This report is also published on our web site and additional copies of this report may be obtained by calling YCUA Customer Service at 734.484.4600.

If you wish to learn more about the plants that treat our water or obtain information regarding Detroit Board of Water Commissioner meetings, please visit www.dwsd.org or call DWSD's Water Quality Division at 313.267.3629.

IMPORTANT CONTACTS

(clip and save for future reference)

YCUA: 734.484.4600 / www.ycua.org

DWSD: 313.267.3629 / www.dwsd.org

EPA Safe Drinking Water Hotline: 800.426.4791

EPA Web Site: www.epa.gov/safewater

MDEQ Web Site: www.michigan.gov/deq

QUESTIONS? COMMENTS?

If you have questions specific to your community's water distribution system, please contact the following individuals, or attend your local board meeting:

Augusta Charter Township: John Linville, Utilities Manager, 734.439.7715, 800.884.2860, or 734.817.2326 (pager). The Township Board meets on the second and fourth Tuesdays each month at the Township Hall, 8021 Talladay Road. Dates and times are posted on cable channel 12 or call 734.461.6117.

Pittsfield Charter Township: Michael Luptowski, Utilities Director: 734.822.2110; Utilities Customer Service: 734.822.3105; Water and Sewer Field Office and 24-hour Emergency Line: 734.822.2110. The Township Board meets on the second and fourth Tuesdays of the month at 7:30 pm at the Administration Building, 6201 W. Michigan Avenue. For more information call: 734.822.3120.

Superior Charter Township: Rick Church, Utilities Director, 734.480.5500. The Township Board meets on the first and third Mondays of the month at 7:30 pm at the Township Hall, 3040 North Prospect Road.

Charter Township of Ypsilanti, City of Ypsilanti, and Southwest Canton Charter Township: Jeff Castro, Water Distribution Supervisor, jcastro@ycua.org or 734.484.4600 extension 305. YCUA's Board meets the fourth Tuesday of the month at 4:00 pm at the YCUA Eldon P. Ahles Administration Building located at the corner of State and McGregor Roads.

Ypsilanti Community Utilities Authority

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