



# 2004 WATER QUALITY REPORT

## KEEPING YOU INFORMED!

The Ypsilanti Community Utilities Authority (YCUA) provides your drinking water and is pleased to present you with this seventh 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 goal.

## 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 report, please visit the Detroit Water and Sewerage Department's (DWSD's) website at [www.dwsd.org](http://www.dwsd.org) or contact Mary Lynn Semegen, (313) 935-7106, [semegen@dwsd.org](mailto:semegen@dwsd.org).

## 2004 WATER SYSTEM IMPROVEMENTS

### Township and City of Ypsilanti:

- **Second Connection to DWSD Water System:** Work on this second water source continued through 2004, and will be completed in 2005. Project cost: approx \$3.7 million.
- **City Water Main and Paving Improvement Projects:** The City of Ypsilanti and YCUA jointly implemented several projects covering a number of City streets and water mains in the Norris Subdivision, Martin Place, Gerganoff Subdivision, Central Business District, and Clarkesville areas. Approximately 10.2 miles of water main was replaced. Project cost: \$8.9 million.
- **Grove Road and Washtenaw Street Water Main and Paving Improvements:** These projects consisted of replacing more than 4,775 feet of aging water main on Grove Road between Michigan Avenue and Tyler Road and Washtenaw Street between North Huron and Adams Streets. Project cost: \$925,000.
- **Merritt Road Water Booster Station Upgrades:** An additional 200-horsepower pump was installed to increase the capacity of the Merritt Road booster pump station, which provides adequate water quantity and pressure to the west and northwest portions of YCUA's water service area. Project cost: \$35,000.

### Augusta Charter Township

- **Second Connection to YCUA:** Augusta Charter Township began and completed construction of a second water connection to the YCUA system during 2004. As new developments are constructed in the future, this second connection will be looped with the main connection to increase reliability.

### Pittsfield Charter Township

- **Water System Upgrade (April 2004 - August 2005):**
  - Installation of five miles of 30-inch water main buried underneath Merritt Road, Textile Road and Michigan Avenue.
  - A five-million-gallon ground storage tank located at Textile and Marton.
  - A booster station along side the storage tank capable of delivering over 7500 gallons per minute with its six service pumps. The booster station is equipped with a generator for back up power.

### Superior Township

- **Prospect Road Water Main Improvement:** This project consisted of installing 1,685 feet (approximately one-third mile) of new water main along Prospect Road, between Berkshire Drive and Club Lane. This installation completed the looping of water mains in that section and has provided redundancy to the western side of our water district. Project cost: approximately \$280,000.
- **Superior Township Utility Department Second Connection to YCUA:** The construction of this second water connection began in 2004 and is still in progress. Located at Geddes and Ridge Roads, this connection will provide a second source of water for Superior Township as well as additional fire protection and reliability. Project cost: approximately \$1,300,000.

## 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 2003 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.

**e.n.d.** - Erosion of natural deposits.

**nd** - Not detectable at testing limit.

**na** - Not applicable.

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

# YCUA WATER QUALITY TEST RESULTS FOR 2004

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 2004. Some results are from previous years, because the State allows monitoring for certain contaminants less than once per year, as their concentrations are not expected to change year to year. Lead, Copper and Bacteriological monitoring is performed by each individual community and is presented as the last entry below. 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.**

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

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
Fluoride	2004	ppm	1.0	na	na	4	4	water additive to promote strong teeth; e.n.d.; discharge from fertilizer/aluminum factories

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

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
Total Trihalomethanes	2004	ppb	24.6	10.2	48.5	na	80	by-products of drinking water chlorination
Haloacetic Acids	2004	ppb	19.2	5.3	40.1	na	60	by-products of drinking water chlorination
Chlorine Residual	2004	ppm	0.71	0.62	0.79	4	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	2004	ntu	na	na	0.23	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.*

## Total Organic Carbon Removal

*Total Organic Carbon (TOC): The TOC removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each month and because the level was low, there is no requirement for TOC removal. The major source of TOC in drinking water is the erosion of natural deposits.*

## Unregulated Parameters

contaminant	test date	unit	avg	low	high	MCLG	MCL	likely sources
Sodium	2004	ppm	5	na	na	na	na	erosion of natural deposits

## Individual Community Total Coliform Detections (monthly monitoring in the distribution system)

community	test date	highest percentage	MCLG	MCL	likely sources
City of Ypsilanti	7/2004	<1%	0	<5%/mo*	naturally present in the environment
Ypsilanti Township	10/2004	<1%	0	<5%/mo*	naturally present in the environment
Pittsfield Township	11/2004	<1%	0	<5%/mo*	naturally present in the environment

*\*The MCL for Total Coliform states that fewer than 5% of monthly samples can test positive. Each of the communities above had a single positive detection in one month that retested negative. There was no violation or need for public notification.*

## Individual Community 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	2002	ppb	11	1	0	AL=15	e.n.d.; corrosion of household plumbing
Copper	2002	ppm	0.26	0	1.3	AL=1.3	e.n.d.; corrosion of household plumbing
Superior Charter Township							
Lead	2002	ppb	1.5	0	0	AL=15	e.n.d.; corrosion of household plumbing
Copper	2002	ppm	0.022	0	1.3	AL=1.3	e.n.d.; corrosion of household plumbing
Pittsfield Charter Township							
Lead	2002	ppb	0	0	0	AL=15	e.n.d.; corrosion of household plumbing
Copper	2002	ppm	0.10	0	1.3	AL=1.3	e.n.d.; corrosion of household plumbing
Augusta Charter Township							
Lead	2002	ppb	2.5	0	0	AL=15	e.n.d.; corrosion of household plumbing
Copper	2002	ppm	0.635	0	1.3	AL=1.3	e.n.d.; corrosion of household plumbing

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

*Information on Lead:* Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than others in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your home's water tested by a private laboratory and/or to flush your tap for 30 seconds to two minutes before using the 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](mailto:jcastro@ycua.org) or 734.484.4600 extension 305.

Additional information about YCUA is available on our web site at [www.ycua.org](http://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](http://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](http://www.ycua.org)

DWSD: 313.267.3629 / [www.dwsd.org](http://www.dwsd.org)

EPA Safe Drinking Water Hotline: 800.426.4791

EPA Web Site: [www.epa.gov/safewater](http://www.epa.gov/safewater)

MDEQ Web Site: [www.michigan.gov/deq](http://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](mailto: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.