



2011 Drinking Water Quality Report

WATER SERVICES DEPARTMENT

1850 Spaulding Road, Kettering, OH 45432
www.mcoho.org/water



SERVICE GROUPS

Customer Services

Water & Sewer Bill Information 781-2688

Education/Community Relations 781-2532

Engineering Services

Backflow Prevention 781-2627

Permits 781-2653

Inspections 781-2650

Environmental Laboratory

4257 Dryden Rd. 496-7051

Field Services

After Hours/Emergency Repairs 781-2678

Financial Services

451 W. Third St. 225-4660

IT Services

Geographical Information System 781-2618

Records and Drafting 781-2651

Water Reclamation Services

Eastern Regional 225-5004

Western Regional 496-7064

Visit our web site at www.mcoho.org/water for more information.



Commissioner
Debbie Lieberman
President



Commissioner
Judy Dodge



Commissioner
Dan Foley

Dear Water Services Customers,

I would like to take this opportunity to introduce myself as the new Director of Environmental Services. In the short time I have been in this position, I have been very impressed with the staff, their expertise, and the work that is done by Montgomery Water Services. I am not surprised; Montgomery County has a nationwide reputation for being professional and innovative. I am honored to now be a part of this noteworthy organization.

And, it is with pleasure that I can announce Montgomery County has once again met and surpassed all Federal and State standards for drinking water!

On behalf of the Montgomery County Commissioners and the employees of the Water Services Department, I am pleased to present our 2011 Water Quality Report. Our intensive water quality testing and monitoring program assures you high quality drinking water. This report provides you with important information about the quality of the public drinking water supply. The abundance of quality water in our area is a vital piece of our community's economic development. Our water is a resource that we value and a responsibility we respect.

We work hard to provide you with safe, reliable, cost-effective water and outstanding customer service. We remain committed to the safety of our employees and the integrity of the essential service we provide.

I invite you to read this report and learn more about your Water Services.

Sincerely,

Patrick Turnbull, P.E.
Environmental Services Director

Our Mission

To provide water reclamation and water supply services to our customers in a safe and environmentally responsible manner.

Our Vision

A cohesive team that delivers exceptional water services through innovation and commitment to our community and the environment.

Our Principles

Excellence Innovation Teamwork Mutual Respect Commitment Integrity



MONTGOMERY
C O U N T Y

Top Three Customer FAQs

What options do I have for paying my bill?

- ✦ Pay online at www.mcoho.org/water. You can make a payment by credit card or check.
- ✦ Pay automatically in a safe, convenient and confidential way. To get more information or to sign up log on to www.DirectPaymentPlan.com
- ✦ Pay by telephone. Credit Card payments are accepted by calling (937)781-2688.
- ✦ Pay by mail. Payments are posted on date of receipt as opposed to the date mailed.
- ✦ Pay at a Deposit Box. Visit our website at www.mcoho.org/water for location information.
- ✦ Pay in person:

Montgomery County Administration Building
451 West Third Street
Dayton, OH 45422

Montgomery County Water Services
1850 Spaulding Rd.
Kettering, OH 45432



What is the hardness of our county water?

- ✦ Elements that contribute to water hardness are calcium and magnesium. Our water hardness is about 9 grains per gallon(150 parts per million).

What could cause a higher than normal water bill?

- ✦ If it is summer, many people's water usage increases both inside and out. More bathing, more laundry, filling swimming pools, plus watering lawns and plants adds up.
- ✦ Undetected leaks can also cause one's bill to increase. Even the smallest leak can be costly. Check your toilets and other plumbing fixtures including outside faucets and hose bibs. It may be cost effective to have a plumber inspect your home's plumbing system.
- ✦ Make sure we are able to read your meter regularly. Bills are estimated when we are unable to get a meter reading. The estimates may be lower than actual usage resulting in a higher bill once an actual reading is taken.

Visit our website at www.mcoho.org/water for more FAQs

Customer Satisfaction Rating Reaches 96%

Over 250,000 Montgomery County residents and more than 6,000 businesses depend upon our services. Our ongoing commitment is evident. We received a 96% satisfaction rating from our business customers in a 2010 survey conducted by Wright State University. Quick response, accurate information, timely resolutions, and professionalism were some the reasons cited for the high rating. We continue to be responsive to our customers and to initiate innovative work practices that further enhance the viability of our water resources.



Insuring Safe Drinking Water in Montgomery County



Environmental Lab

Our Environmental Laboratory performs thousands of analytical tests on drinking water. The lab is certified by the Ohio Environmental Protection Agency and consistently receives high ratings on annual proficiency tests.

Ensuring Quality

- ✦ Water samples throughout the distribution systems are collected on a daily basis. More than 200 samples are analyzed for bacteria content each month.
- ✦ The Lab receives approximately 13,000 water samples each year to be analyzed for 35,000 tests.
- ✦ Specialized samples from the treatment facilities and the distribution system are analyzed daily for process control, surpassing even regulatory requirements.



GLOSSARY

ACTION LEVEL (AL) - the concentration of a contaminant, which if exceeded, trigger treatment or other requirements which a system must follow.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG) - 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 CONTAMINANT LEVEL (MCL) - the highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

PARTS PER MILLION (PPM) - one part per million (milligrams per liter) corresponds to one minute in two years, or a single penny in \$10,000.

PARTS PER BILLION (PPB) - one part per billion (micrograms per liter) corresponds to one minute in two thousand years or one penny in \$10 million.

ND - none detected

N/A - not applicable

pCi/L - Pico curies per liter, a measure of radioactivity in water.

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

NTU - Nephelometric Turbidity Units, a measure of water cloudiness.

Special Health Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as 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. USEPA/Centers for Disease Control 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 1-800-426-4791.

This table indicates that Montgomery County drinking water met all standards in 2010.

Contaminants (Units)	Ideal Goals (MCLG)	Highest Level Allowed (MCL)	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Fluoride (ppm)	4.0	4.0	1.21	0.81 – 1.21	No	2010	Natural Geology / Dental Supplement
Nitrate (ppm)	10.0	10.0	1.56	0.15 – 1.56	No	2010	Fertilizer runoff / natural geology
Turbidity (NTU)	N/A	TT=1 TT: ≥95% must be ≤0.3	1.76 100% ⁽¹⁾	0.02 – 0.76	No	2010	Lime softening residuals
cis- 1,2-Dichloroethylene (ppb)	70	70	0.5	ND-0.5	No	2010	Discharge from factories
Total Organic Carbon (TOC) (ppm)	N/A	TT	1.0 ⁽²⁾	0.54 – 1.13	No	2010	Naturally present in the environment

Regulated at the Customer's Tap

Lead (ppb)* North Area	0	AL = 15	6 ⁽⁴⁾	NA	No	2008	Corrosion of household plumbing systems
Lead (ppb)* South Area	0	AL = 15	< 5 ⁽⁴⁾	NA	No	2008	Corrosion of household plumbing systems
Copper (ppb)* North Area	1300	AL = 1300	60 ⁽⁴⁾	NA	No	2008	Corrosion of household plumbing systems
Copper (ppb)* South Area	1300	AL = 1300	62 ⁽⁴⁾	NA	No	2008	Corrosion of household plumbing systems

Regulated in Distribution System

Total Coliform Bacteria* (% positive Samples per Month) (North)	0%	0%	1.25% ^(3a)	0 - 1.25%	No	2010	Naturally present in the environment
Total Coliform Bacteria* (% positive Samples per Month) (South)	0%	0%	4.13% ^(3b)	0 - 4.13%	No	2010	Naturally present in the environment
Chlorine* (ppm) North	4 ⁽⁷⁾	4 ⁽⁸⁾	1.06 ⁽⁶⁾	0.96 – 1.10	No	2010	Water additive to control microbes
Chlorine* (ppm) South	4 ⁽⁷⁾	4 ⁽⁸⁾	1.15 ⁽⁶⁾	1.01 – 1.19	No	2010	Water additive to control microbes
Haloacetic Acids* (North) (ppb)	N/A	60	4.60 ⁽⁵⁾	3.72 – 6.23	No	2010	By-product of drinking water chlorination
Haloacetic Acids* (South) (ppb)	N/A	60	7.94 ⁽⁵⁾	5.36 – 10.7	No	2010	By-product of drinking water chlorination
Trihalomethanes (North) (ppb)*	N/A	80	24.29 ⁽⁵⁾	16.26 – 29.20	No	2010	By-product of drinking water chlorination
Trihalomethanes (South) (ppb)*	N/A	80	39.55 ⁽⁵⁾	27.82 – 50.53	No	2010	By-product of drinking water chlorination

Unregulated Compounds - concentration in ppb

Bromodichloromethane	N/A	N/A	1.2	0.8 – 1.6	N/A	2010	By- product of drinking water chlorination
Bromoform	N/A	N/A	<0.5	ND – 0.6	N/A	2010	By- product of drinking water chlorination
Chloroform	N/A	N/A	0.83	0.5 – 1.7	N/A	2010	By- product of drinking water chlorination
Dibromochloromethane	N/A	N/A	1.25	0.09 – 1.8	N/A	2010	By- product of drinking water chlorination

* Montgomery County Water Services Data from distribution system, all other data from the City of Dayton

- Dayton complied with requirements for every month of 2010. Turbidity is used to measure the performance of sand filters.
- Dayton complied with alternate compliance criteria for TOC regulations under the D/DBP Rule. The level reported is "average".
- a. Of the 969 distribution samples tested in 2010, 3 tested positive for total coliform bacteria. Subsequent analyses were negative.
b. Of the 1469 distribution samples tested in 2010, 8 tested positive for total coliform bacteria. Subsequent analyses were negative.
- 90th percentile – 90 % of the residential samples were below this level. No MCL exceedances in 19 years of testing.

- Highest running annual average
- Highest running quarterly average
- Maximum residual disinfectant level goal (MRDLG) – The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefit 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.

Our Water Source

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 dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, United States Environmental Protection Agency (USEPA) prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking 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 health risk. Even rainwater contains dissolved minerals or other chemicals. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at: **800-426-4791**.

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, 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 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 can also come from gas stations, urban 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.

Water Source Information

Montgomery County purchases its water from the City of Dayton and distributes the water to its customers. The source of the City of Dayton's drinking water is the Miami Valley Buried Aquifer. This aquifer is a large underground area of water-bearing sand and gravel deposits. Information about the aquifer can be obtained from the **Ohio EPA: 937-285-6357**.

Lead Precautions

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. Montgomery County Water Services 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 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 at the Safe Drinking Water Hotline:

- ✦ www.epa.gov/safewater/lead
- ✦ 800-426-4791



"Please don't soil our waters!"



It's no fish story!

Soil erosion is our #1 water pollutant.

Believe it or not, the biggest threat to the Miami Valley's water quality is plain old dirt. Soil washes into our rivers, lakes and streams...from our lawns, roads, driveways, and construction sites.

What's wrong with soil?

It clogs waterways and damages fishes' gills. Soil carries contaminating oil and other chemicals into our water.

What can you do? A few simple things are a great start:

- Seed and mulch any bare soil on your land.
- Repair and stabilize places where you see soil eroding.
- Minimize the time soil is exposed when you do construction of landscaping.

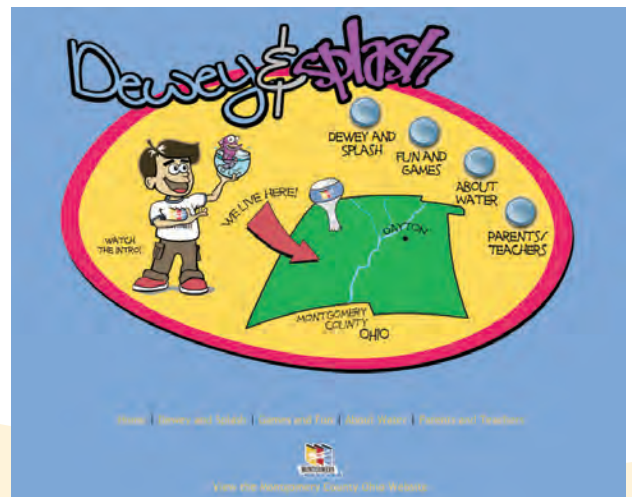
Public Education Initiative

Programs

- ★ Interactive; hands-on; curriculum based classroom presentations
- ★ Activities available for summer camp programs
- ★ Tours: Environmental Laboratory
Wastewater Reclamation Plants
- ★ Speakers for service clubs and other civic organizations

All programs offered free of charge

For more information contact Stephanie Smith, Communications Manager, at (937)781-2532 or smithsteph@mcoho.org.



Introducing Dewey&Splash
Interactive Website

www.deweyandsplash.org



Water Services Department
1850 Spaulding Road
Kettering, OH 45432
www.mcoho.org/water

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Standard
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PAID
Dayton, OH
Permit No. 314



GET INVOLVED!

THERE ARE LOTS OF WAYS TO ACTIVELY PARTICIPATE IN WATER QUALITY ISSUES IN THIS COMMUNITY. PUBLIC PARTICIPATION AND COMMENTS ARE ENCOURAGED AT REGULAR MEETINGS OF THE BOARD OF COUNTY COMMISSIONERS. CONTACT THE COMMISSIONERS' OFFICE AT 225-4690 FOR MEETING DATES AND TIMES.

