



EVERY
DROP
COUNTS

2010

FRANKLIN COUNTY
WATER QUALITY REPORT

FRANKLIN COUNTY DEPARTMENT

OF SANITARY ENGINEERING

DISTRICT # 4

PWSID#2501003

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Franklin County Sanitary Engineer's - District #4

PWS ID # 2501003

614-525-3940

The Franklin County Department of Sanitary Engineering has been providing clean water to your community helping to keep you and your family healthy. We take this mission very seriously. Our constant goal is to provide you with a safe and dependable supply of drinking water. This report covers January 1 through December 31st, 2010. The Franklin County Sanitary Engineers District #4 drinking water supply surpassed the strict regulations of both the State of Ohio and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this annually. The Franklin County Department of Sanitary Engineering has a current unconditioned license to operate our water system.

In 2010, our water department distributed 525 million gallons of water to customers. Our water source is purchased pretreated water from the City of Columbus, the Dublin Road Water Plant and distributed to Sanitary District #4. This water services customers who live in downtown Columbus, western Franklin County as well as southwestern Franklin County. The Dublin Road Water Plant relies on surface water from the Griggs and O'Shaughnessy Reservoirs on the Scioto River.

Columbus treats your water using disinfection and filtration to remove or reduce harmful contaminants that may come from the source water.

The City of Columbus water system uses surface water from the Scioto River and the Big Walnut Creek, as well as ground water pumped from sand and gravel deposits of the Scioto River Valley. All three sources of water have a relatively high susceptibility to contamination from spills or releases of chemicals. The ground water pumped at the Parson Avenue plant is susceptible (compared to other ground water systems) because there is no significant clay overlying and protecting the aquifer deposits. The Scioto River and the Big Walnut Creek are even more susceptible, because they are more accessible and less protected from spills.

The drinking water source protection areas for the City of Columbus' three water sources contain numerous potential contaminant sources, especially the protection areas for the Dublin Road Water Treatment Plant (extending along the Scioto River). These include industrial activities, storm water runoff from developing areas, and a heavily traveled transportation network running alongside and over the water bodies. Run-off from agricultural fields is a concern in both the Scioto River and Big Walnut Creek watersheds.

The City of Columbus treats the water to meet drinking water quality standards, but no single treatment protocol can address all potential contaminants. The City has been proactive in pursuing measures to further protect its source waters. These include land stewardship programs and incentive-driven programs to reduce erosion and run-off of pesticides and fertilizers into the Scioto River and the Big Walnut Creek and their reservoirs. More detailed information is provided in the City of Columbus' Drinking Water Source Assessment Report, which can be viewed by calling Gary Hannahs, Watershed Manager at (614)645-1721.

If you have any questions about this report or concerning your water utility, please contact Charles McFarland, Operations Superintendent, by calling 614-525-3747 or by writing to this address: 280 East Broad Street, 2nd Floor, Room 201, Columbus, OH 43215-4562. We want our valued customers to be informed about their water utility.

Franklin County Department of Sanitary Engineering: Stephen A. Renner, Director; Michael B. Pliutti, Assistant Director
Franklin County Board of Commissioners: Marilyn Brown, President; Paula Brooks, John O'Grady

The U.S. Environmental Protection Agency (EPA) wants you to know:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that 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 contaminants does not necessarily indicate what 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 (1-800-426-4791).

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.

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 petroleum, 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.

Franklin County Sanitary Engineers - Sanitary District #4								
2010 Monitoring Results for Contaminates in Drinking Water								
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer, organ transplants, HIV/AIDS, 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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791)								
Columbus' water is regularly tested for organisms that could be harmful to people- including cryptosporidium (Crypto). While it is sometimes found in the Ohio Rivers and streams, Crypto has NEVER been found in our drinking water								
Contaminant	Unit	MCLG Health Goal	MCL EPA Limits	Level Detection	Range Detected	Violation (Yes-No)	Year ¹ Sampled	Potential Source of Contamination
The following results are from tests completed by Dublin Road Water Plant								
Microbiological Contaminants								
Turbidity ²	NTU	NA	TT	0.29 Highest	0.04-0.29	NO	2010	Soil Runoff
Total Organic Carbon ³	TT	NA	TT	2.35 LRAA	1.80-3.08	NO	2010	Naturally present in the environment
Inorganic Contaminants								
Fluoride	ppm	4	4	1.07	0.80-1.07	NO	2010	Erosion of natural deposits. Water additive to promote strong teeth.
Nitrate	ppm	10	10	7.1	ND-7.1	NO	2010	Runoff from fertilizer use. Leaching from septic tanks. Erosion of natural deposits.
Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.								
Synthetic Organic Contaminants								
Atrazine	ppb	3	3	0.32	ND-1.66	NO	2010	Runoff from herbicide used on row crops.
Simazine	ppb	4	4	ND	ND-0.17	NO	2010	Herbicide Runoff
Alachlor	ppb	0	2	ND	ND	NO	2010	Agricultural Herbicide Runoff
Volatile Organic Contaminates & Disinfection By Products (Tested by Sanitary District #4)								
Total Chlorine	ppm	4 (MRDLG)	4 (MRDL)	1.52 avg.	0.28-2.1	NO	2010	Water additive used to control microbes.
Haloacetic Acids (HAA5)	ppb	NA	60	29 avg.	12.15-46	NO	2010	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs) ³	ppb	0	80	50 avg.	14.3-85.6	NO	2010	Byproduct of drinking water chlorination

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. The Franklin County Department of Sanitary Engineering 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 from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Lead & Copper Monitoring Performed at Home Tap							
Contaminant	Unit	MCLG Health Goal	MCL EPA Limits	Level Detected	Violation (Yes-No)	Year ¹ Sampled	Potential Source of Contamination
Inorganic Contaminants							
Copper	ppm	1.3	1.3 = AL	0.046 (90th percentile) ND-0.062	NO	2008	Corrosion of household plumbing. Erosion of natural deposits.
				All sites below action level			
Lead	ppb	0	15 = AL	ND (90th percentile) ND-1.02	NO	2008	Corrosion of household plumbing. Erosion of natural deposits.
				All sites below action level			

Notes

- The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.
- Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
- Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system, and may have an increased risk of getting cancer.

Definitions

Maximum Contaminant Level (MCL): 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 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 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 disinfectant allowed in drinking water. There is convincing evidence that the 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 requirements, which a water system must follow.

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

90th Percentile: 90% of samples are equal to or less than the number in the chart.

NTU (Nephelometric Turbidity Units): A measure of clarity.

NA: Not applicable

ND: Not detectable at testing limits.

PPB: (parts per billion): micrograms per liter (µg/l).

PPM: (parts per million): milligrams per liter (mg/l).

CDC: Center for Disease Control

EPA: Environmental Protection Agency

Un-Regulated Substances: Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.				
Substance	Unit	Level Detected	Range	Year ¹
Bromodichloromethane	ppb	7.7	NA	2010
Chloroform	ppb	45	NA	2010
Dibromochloromethane	ppb	1.3	NA	2010
Hardness	ppm	121 avg.	119-122	2010
Metolachlor	ppb	ND	ND-0.30	2010
pH	su	7.8 avg.	7.7-7.8	2010
Sodium	ppm	76 avg.	55-120	2010
Metribuzin	ppb	ND	ND	2010
Bromoform	ppb	<0.5	NA	2010

