

The Franklin County Department of Sanitary
Engineering - Sanitary District #4 Water System has
prepared the following report to provide information to
you, the consumer, on the quality of our drinking water.
Included within this report is general health information,
water quality test results, how to participate in decisions
concerning your drinking water and water system
contacts.

## Sanitary District #4 | pwsid#2501003

The Franklin County Department of Sanitary Engineering is responsible for providing a safe and dependable supply of drinking water to your community. This report covers January 1 through December 31st, 2016. Franklin County has a conditioned license to operate while we meet all of the requirements of our Ohio EPA Director's Findings and Orders. For more information please contact the Franklin County Sanitary Engineer's office at 614-525-3940 or by writing at 280 E. Broad St., 2nd Floor, Room 201, Columbus, Ohio 43215-4562.

The Franklin County Department of Sanitary **Engineering – Sanitary District #4 Water System** receives its drinking water from the City of Columbus' Dublin Road Water Treatment Plant. During 2016 we used over 358 million gallons of water from this connection. 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 Big Walnut Creek and their reservoirs. The City of Columbus' Dublin Road Treatment Plant utilizes water from the Scioto River. For the purpose of source water assessments, all surface waters are considered to be highly susceptible to contamination. Buy their nature, surface waters are open systems with not confining layer to impede containment movement, and have relatively short travel times from source to public water systems intake

More detailed information is provided in the City of Columbus' Drinking Water Source Assessment Report, which can be viewed by calling the Watershed section at (614) 645-1721.

Visit http://watershed. columbus.gov for more details about watershed management and the land stewardship program.

		2016 M	onitoring Re	sults for C	ontaminate	s in Drinkin	g Water	
Contaminant	Unit	MCLG Health Goal	MCL EPA Limits	High Levels	Range Detected	Violation (Yes-No)	Year Sampled	Potential Source of Contaminat
		The fo	llowing results a	re from tests	completed by D	ublin Road Wat	er Plant	
Fluoride	ppm	4	4	0.91	0.84-0.98	No	2016	Water additive. Erosion of natural deposits.
Nitrate	ppm	10	10	10.7	<0.5-10.7	Yes	2016	Agricultural fertilizer runof
Simazine	ppb	4	4	<0.10	<0.10-0.22	No	2016	Agricultural herbicide runo
Atrazine	ppb	3	3	0.14	<0.10-0.26	No	2016	Agricultural herbicide runo
Metolachlor	ppb	N/A	N/A	<0.20	<0.20-0.33	No	2016	Agricultural herbicide runo
Metribuzin	ppb	N/A	N/A	<0.10	<0.10-0.11	No	2016	Agricultural herbicide runo
Total Organic Carbon		N/A	TT (removal ratio >1)	3.06	2.78-4.05	Yes	2016	Naturally present in environme
Turbidity	NTU	N/A	<1%	0.15 / 100%	0.02-0.10/ 100-100%	No	2016	Soil runoff
рН	units	N/A	7.0-10.5	7.8	7.7-7.8	No	2016	Naturally occurring
Hardness	ppb	N/A	N/A	121	120-124	No	2016	Naturally occurring
Sodium	ppm	N/A	N/A	70.8	35.0-90.4	No	2016	Natural/Treatment proces
			Unregulated (	ontaminant N	Monitoring Rule	(UCMR-3)		
	320	2.220	1224	2.2.2.1		100	232323	
Chlorate	ppb	N/A	N/A	227	78-370	No	2014	Agricultural defoliant of desico
Chlorate	ppb	N/A N/A	N/A N/A	0.39	78-370 0.24–0.58	No No	2014	
								Naturally occurring; Steel produ  Chrome plating; dyes & pigmer wood preservation
Chromium	ppb	N/A	N/A	0.39	0.24–0.58	No	2014	Naturally occurring; Steel produ  Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four
Chromium Hexavalent Chromium	ppb ppb	N/A N/A	N/A N/A	0.39	0.24–0.58 0.12-0.35	No No	2014	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, anima bacteria
Chromium  Hexavalent Chromium  Molybdenum	ppb ppb	N/A N/A	N/A N/A	0.39 0.25 7.5	0.24–0.58 0.12-0.35 4.1-12.0	No No	2014 2014 2014	Naturally occurring element foun ores and present in plants, anima
Chromium  Hexavalent Chromium  Molybdenum  Strontium	ppb ppb ppb	N/A N/A N/A	N/A N/A N/A	0.39 0.25 7.5	0.24–0.58 0.12-0.35 4.1-12.0 15-1300	No No No	2014 2014 2014 2014	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, anima bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stab in manufacture and processing paper, cotton, textile product
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium	ppb ppb ppb ppb ppb	N/A N/A N/A N/A N/A	N/A N/A N/A N/A	0.39  7.5  712  0.49  0.12	0.24–0.58 0.12-0.35 4.1-12.0 15-1300 0.37-0.62 N/A	No No No No No No	2014 2014 2014 2014 2014 2014	Chrome plating; dyes & pigmen wood preservation  Naturally occurring element four ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stab in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium	ppb ppb ppb ppb ppb	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	0.39  7.5  712  0.49  0.12	0.24–0.58 0.12-0.35 4.1-12.0 15-1300 0.37-0.62 N/A	No No No No No No	2014 2014 2014 2014 2014 2014	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stable in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium  1, 4-Dioxane	ppb  ppb  ppb  ppb  ppb  ppb  ppb  The followire	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A Om tests comple	0.39  7.5  712  0.49  0.12	0.24–0.58  0.12-0.35  4.1-12.0  15-1300  0.37-0.62  N/A	No	2014 2014 2014 2014 2014 ct #4 Water Sy	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stable in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium  1, 4-Dioxane  Total Chlorine  Total Coliform	ppb ppb ppb ppb ppb ppb ppb ppb resence/	N/A N/A N/A N/A N/A N/A A N/A N/A A N/A N/	N/A N/A N/A N/A N/A N/A  N/A  N/A  Om tests comple  4 (MRDL)  Present in <5%	0.39 0.25 7.5 712 0.49 0.12 ted by the Cit	0.24–0.58  0.12-0.35  4.1-12.0  15-1300  0.37-0.62  N/A  ty Of Columbus  .96-141	No	2014 2014 2014 2014 2014 2014 ct #4 Water Sy 2016	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stable in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo  /stem  Water additive to control micro
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium  1, 4-Dioxane  Total Chlorine  Total Coliform Bacteria Haloacetic	ppb ppb ppb ppb ppb ppb  The following ppm Presence/ Absence	N/A N/A N/A N/A N/A N/A N/A  N/A  N/A	N/A  N/A  N/A  N/A  N/A  N/A  Om tests comple  4 (MRDL)  Present in <5% of monthly samples	0.39 0.25 7.5 712 0.49 0.12 ted by the Cit 1.19 0.0%	0.24–0.58  0.12-0.35  4.1-12.0  15-1300  0.37-0.62  N/A  ty Of Columbus  .96-141  0.0%-0.0%	No N	2014 2014 2014 2014 2014 2014 2014 2016 2016	Chrome plating; dyes & pigmen wood preservation  Naturally occurring element foun ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stable in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium  1, 4-Dioxane  Total Chlorine  Total Coliform Bacteria  Haloacetic Acids (HAA5)  Total Trihalomethan	ppb ppb ppb ppb ppb  The followir ppm Presence/ Absence ppb	N/A	N/A  N/A  N/A  N/A  N/A  N/A  N/A  Om tests comple  4 (MRDL)  Present in <5% of monthly samples  60  80	0.39 0.25 7.5 712 0.49 0.12 1.19 0.0% 17.2 27.8	0.24–0.58  0.12-0.35  4.1-12.0  15-1300  0.37-0.62  N/A  ty Of Columbus  .96-141  0.0%-0.0%  8.3-27.4	No N	2014 2014 2014 2014 2014 2014 2014 2016 2016 2016	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stable in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo  /stem  Water additive to control micro  Bacteria present in environment  Byproduct of drinking water chloric
Chromium  Hexavalent Chromium  Molybdenum  Strontium  Vanadium  1, 4-Dioxane  Total Chlorine  Total Coliform Bacteria  Haloacetic Acids (HAA5)  Total Trihalomethan	ppb ppb ppb ppb ppb  The followir ppm Presence/ Absence ppb	N/A	N/A  N/A  N/A  N/A  N/A  N/A  N/A  Om tests comple  4 (MRDL)  Present in <5% of monthly samples  60  80	0.39 0.25 7.5 712 0.49 0.12 eted by the Cit 1.19 0.0% 17.2 27.8 r Monitoring F <1 (90th 20 Site All sit	0.24–0.58  0.12-0.35  4.1-12.0  15-1300  0.37-0.62  N/A  ty Of Columbus  .96-141  0.0%-0.0%  8.3-27.4  14.4-43.4	No N	2014 2014 2014 2014 2014 2014 2014 2016 2016 2016	Chrome plating; dyes & pigmer wood preservation  Naturally occurring element four ores and present in plants, animal bacteria  Naturally occurring element  Naturally occurring element  Used as a solvent or solvent stable in manufacture and processing paper, cotton, textile product automotive coolant, cosmetics shampoo  /stem  Water additive to control micro  Bacteria present in environment  Byproduct of drinking water chloric







# Understanding Important Abbreviations, Terms and Definitions:

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) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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 requirements which a water system must follow.

The "<"symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

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



# What are Sources of Contamination to **Drinking Water?**

The sources of drinking water both tap water and bottled water includes 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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, urban Strom water runoff, and septic systems; (E) radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in 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, including bottled 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

# Understanding the Dangers of Lead in 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. Franklin County Sanitary Engineering – Sanitary District #4 Water System 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 at 800-426-4791or at http://www.epa.gov/safewater/lead.

### Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

## **Turbidity**

Turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is {0.3NTU} in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above the Sanitary District 4 Water System who recieves their water from the City of Columbus Dublin Road Water Treatment Plant highest recorded turbidity result for 2016 was 0.10NTU and the lowest monthly percentage of samples meeeting the turbidity limits was 0.02 NTU.

The Franklin County Sanitary Engineers – Sanitary District #4 Water System incurred zero water quality Maximum Contaminant Levels (MCLs) in 2016.

### Nitrate Educational Information

Nitrate in the water at levels above 10ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

# **About Your Drinking Water**

The EPA requires regular sampling to ensure drinking water safety. The Franklin County Department of Sanitary Engineering – Sanitary District #4 water was sampled for microbiologicals; inorganics; synthetic organics; volatile organics; disinfectants and disinfection by-products during 2016. Samples were collected for a total of 16 different contaminants, some of which were not detected in the Franklin County Sanitary Engineering Sanitary District #4 Water System's water supply. The Ohio EPA requires 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.





## Who Needs to Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infection. 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).

How do I participate in decisions concerning my drinking water? Public participation and comment are encouraged at regular meetings of the Franklin County Commissioners which meets every Tuesday at 7:00 p.m. For more information on your drinking water contact the Franklin County Sanitary Engineering at (614) 525-3940.

# Water Conservation: When you start saving water, you start saving money

Being water and energy efficient provides a wide range of benefits for consumers, businesses and the community as a whole. Using less water means moving and treating less water which helps to reduce the strain on our drinking water supplies and wastewater infrastructure.

Delivering water and wastewater services is also an energy-intensive effort as the water is treated, pumped to homes and businesses, then pumped to wastewater facilities to be treated again. Pursuing energy efficiency in our water systems can significantly reduce operating costs, while mitigating the effects of climate change.

Whether through simple daily tasks or the installation of water-efficient products, there are many ways to decrease water and energy use in our homes. You can cut your water usage by changing a few habits.

# **Consider Following Some of These Steps Throughout Your House:**

### Make sure your home is leak-free

Check your water meter over a period of time when you are certain that no water is being used. If the meter reading changes, you have a leak. And repair leaks as soon as they are discovered. A seemingly small leak can waste 70-100 gallons of water a day.

## Check your toilet tank

Lower the rise of toilet tank water by adjusting the tank float. Another option is to put a small plastic jug filled with water and some weights into the tank to displace water. You could save up to half a gallon with every flush. If you are remodeling your bathroom, replace your old inefficient 3-5 gallon-per-flush toilet with a new low volume 1.6 gallon-per-flush model.

Leaks may be difficult to see, so check your toilet tank by adding a few drops of food coloring into the tank. Wait 20 minutes and then look in the bowl for traces of the dye. If you see dye in the bowl, you have a leak. If the color in the tank is lighter or you don't see the dye any longer, this is another indication that you have a leak. Call a plumber if you can't fix the problem yourself.

#### Install low-flow devices

Installing a low-flow showerhead or fitting a flow restrictor into your current shower-head can reduce water usage by 50%. A low-flow sink faucet aerator can save up to 280 gallons per year. These devices also save on hot water costs and increase water pressure.

### Cut down on marathon showers

A shower almost always uses less water than a bath. Even a five-minute shower can use about 35 gallons of water, so keep it short! Shorter showers save hot water costs and air conditioning bills.

## Turn off the water while brushing teeth or shaving

Only turning on the water to rinse can save up to 10 gallons of water per day.

### Defrost food in the refrigerator

Don't use running water to thaw food; it wastes water. Defrosting in the refrigerator also helps prevent bacterial contamination.

#### Don't over-wash clothes

By eliminating the pre-soak and second rinse cycles when you use your washing machine, you can save as much as 19 gallons of water per load.

### Put the hose away

Washing your car with a bucket and sponge instead of a hose saves a lot of water. A hose can waste 6 gallons per minute if you leave it running, but using a bucket and sponge only uses a few gallons. Where possible, consider putting your car in the grass to allow the water to soak back into the ground instead of the sewer.

#### Beat the heat

The best time to water your yard is in the early morning or late evening when it's cool outside. Watering when it's hot and sunny is wasteful because most of the water evaporates before the plants have time to drink it. Also, when watering the yard, make sure not to water the plants too much. Remember that a little sprinkle goes a long way.

## Remember, water can be recycled

Franklin County

Where Government Works

Don't pour water down the drain when there may be another use for it. For example, when meals are prepared and vegetables or other fresh produce are washed, collect that water and use it to water the plants.



