

ANNUAL WATER QUALITY REPORT 2011



Columbus City Utilities
Columbus, Indiana

PWSID# IN5203002

Mission Statement

The Columbus City Utilities shall provide our customers with the highest quality services at a reasonable cost with the most responsible impact on the environment.

Water Conservation . . .

Prevent wasted water and save money with these tips:

Inside your home

- Repair faucet and toilet leaks; replace old fixtures with new water-saving devices
- Turn off the tap while shaving and brushing teeth
- Run the dishwasher and washing machine only when full
- Keep a container of water in the refrigerator for drinking instead of allowing it to run for each glass

Outdoors

- Water the lawn and garden in the early morning to avoid evaporation
- Use mulch around plants and shrubs to reduce evaporation
- Check that sprinklers water the lawn and not the pavement and do not water on windy or rainy days



Contact us . . .

For further water quality information on Columbus City Utilities or our Water Quality Report, please visit our website at: www.columbusutilities.org.

You can contact us through a number of ways if you have questions or concerns regarding your drinking water.

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The Columbus Utility Service Board meets in public session the third Thursday of each month to discuss the business of the Utilities. The meetings are held in the Board Room at the Utilities Service Center located at 1111 McClure Road in Columbus, Indiana at 11:30 am.



Columbus City Utilities is pleased to present its Annual Water Quality Report. The 1996 Safe Drinking Water Act requires that every public water system serving more than fifteen service connections prepare a water quality report which provides information on where water comes from and how it compares to current standards. The Columbus City Utilities Annual Water Quality Report explains the water source, treatment methods and a list of compounds that were detected during the 2010 testing year.

Columbus City Utilities meets all drinking water quality standards set forth by the USEPA, the Indiana Department of Environmental Management (IDEM) and the American Water Works Association. We are pleased to report that during the calendar year for 2010 (or before), there were no violations of these standards and all monitoring requirements as set forth by IDEM, were met or exceeded. The operators at our water treatment plant have a combined water treatment experience of over 100 years; are certified by the State of Indiana; and they must continue training to keep their certification valid.

Water Source - Since the early 1950's, Columbus has obtained all its public drinking water from groundwater resources. This groundwater is obtained using twenty-three gravel-packed wells

and two filtration plants. Water Plant #1 is located in Lincoln Park, which is situated just northwest of the Columbus Regional Hospital. This plant is supplied by eight wells that are situated throughout the park proper and are capable of supplying a total of 8,200 gallons per minute to the plant.

Water Plant #2 is located just north of the Southside Elementary School on Spear Street near the Bartholomew County 4-H Fairgrounds. This plant is supplied by fifteen wells from the 4-H Fairground well field, the Marr-Glick well field and the Southern well field. These wells are located throughout the fairground, school property and property east of SR 11; and can supply more than 14,800 gallons per minute to the plant.

The environment can expose ground water to many contaminants before it is brought to the surface. 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 accordance with 3271AC8-4.1-8(3), the Columbus Water Utility has prepared a Wellhead Protection Program to ensure the safety of source waters from the City of Columbus. The Wellhead Protection Area (WHPA) compasses the full spectrum of land uses. There are significant industrial areas within the WHPA's of each treatment facility.



Possible Contaminants

The following is a list of contaminants that may be present in source water, however, none of these have been detected at significant levels in the Columbus system:

- ◆ **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 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
- ◆ **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.



Treatment - Once the water is pumped to the plants it is treated for iron and manganese removal, filtered, disinfected with chlorine, fluoridated to prevent tooth decay, treated with polyphosphate and pumped to the distribution system. Testing is performed throughout this process and in the distribution system to ensure that the water which is delivered meets all applicable criteria.



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 at (800) 426-4791. The EPA constantly reviews the maximum contaminant levels that we must meet and adjusts them when needed.

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 immune system disorders, some elderly persons 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 (a contaminant that can be found in certain surface water sources) and other contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

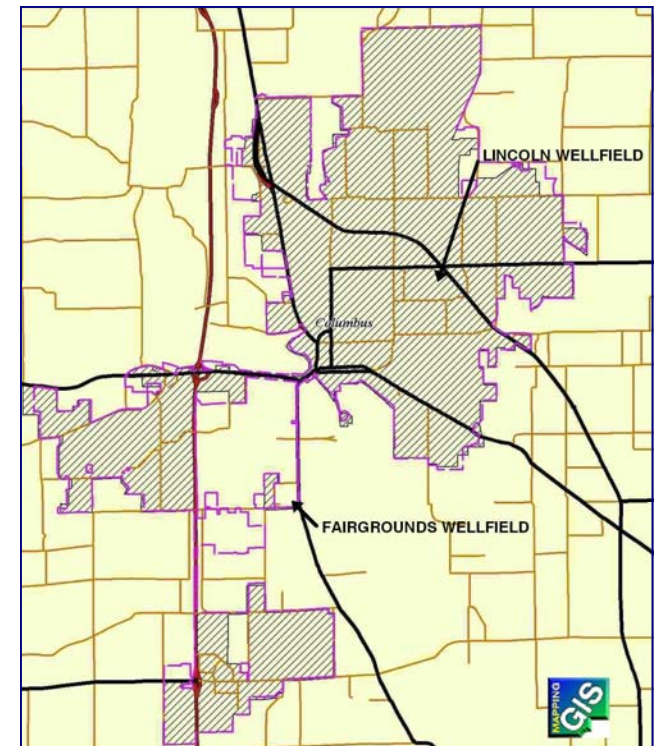
Lead Information - If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Columbus City Utilities is responsible for providing 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 and 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) 426-4791 or at <http://www.epa.gov/safewater/lead>.



Service Area Map



2010 AVERAGE WATER QUALITY DATA

National Primary Drinking Water Parameters	Maximum Contaminant Level (MCL)	Water Plant 1	Water Plant 2
MICROBIOLOGICAL (Percent Positive)			
Coliform	Presence/Absence	Absent	Absent
INORGANIC COMPOUNDS (mg/L)			
Fluoride (Adjusted)	4	1.17	.96
Nickel	0.1	<0.003	<0.003
NITRATES AND NITRITE (mg/L)			
Nitrate (as N)	10	<0.500	2.44
LEAD AND COPPER (mg/L)			
Lead (Action Level)	0.015	<0.004	<0.004
Copper (Action Level)	1.300	<0.005	<0.005
ORGANIC COMPOUNDS (ug/L)			
Total Trihalomethanes	80	11.15	15.55
RADIONUCLIDES (pCi/L)			
Radium 228	5	0.00	0.00
Uranium (mg/L)	0.03	0.0015	0.0016
Gross Alpha	15	2.20	0.90
Gross Beta	40	3.40	3.10
ADDITIONAL PARAMETERS (Unit is mg/L unless specified)			
Conductivity (umhos/cm)		634	462
Hardness as CaCO ₃		332	301
Hardness as CaCO ₃ (Grains/gallon)		19.4	17.6
Iron	0.3	0.08	0.05
Manganese	0.05	<0.05	<0.05
pH (pH Unit)	6.5 - 8.5	7.3	7.4
Total Dissolved Solids		411	292
Arsenic	0.010	<0.005	<0.005

KEY TO ABBREVIATIONS: mg/L = milligrams per Liter
(One milligram per liter is the same as one part per million or one dollar out of one million dollars.)
ug/L = micrograms per Liter

The Columbus Utilities detected measurable quantities of the 20 parameters listed in the above table. Additional parameters were tested for, but were not present in quantities that were detectable. This is done to ensure that your water is as safe as is technologically possible. A list of the additional parameters tested is available upon request.

Plant #1 Turbidity Results for 2010

MCL	maximum level found	sample date	violation	typical source
TT=5NTU	0.708	12/18/10	No	soil runoff
TT= percentage of samples<0.5 NTU	99.98			

Plant #2 Turbidity Results for 2010

MCL	maximum level found	sample date	violation	typical source
TT=5NTU	0.885	12/18/10	No	soil runoff
TT= percentage of samples<0.5 NTU	99.99			



Important Definitions

- ◆ **MCLG - Maximum contaminant level goal.** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- ◆ **MCL - Maximum contaminant level.** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible, using the best available treatment technology.
- ◆ **MRDL - Maximum Residual Disinfectant Level.** The highest level of a disinfectant allowed in drinking water.
- ◆ **MRDLG- Maximum Residual Disinfectant Level Goal .** The level of a drinking water disinfectant below which there is no known or expected risk to health.
- ◆ **AL - Action Level.** The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.
- ◆ **Variance and exemption.** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- ◆ **Turbidity.** The measure of cloudiness of water.