



Village of



Germantown

...Willkommen

DEPARTMENT OF PUBLIC WORKS

Annual Germantown Water Quality Report

WATER QUALITY MEETS ALL REGULATORY STANDARDS

In the year 2011, the Germantown Water Utility (GWU) conducted all DNR required tests to ensure the safety and quality of the drinking water delivered to our customers. All laboratory analysis indicated that the water provided by the Utility met all Federal and State drinking water standards. This report summarizes the water quality provided to customers in 2011.

It also includes details about where your water comes from, what has been detected in your water and how that compares to regulatory standards. We are committed to providing you with useful information.



GWU'S LATEST INITIATIVES

Replaced 3800 ft. of 6" ductile iron pipe with 8" PVC in the Lake Park West condominiums, this pipe had deteriorated badly over the years, and the area was experiencing a number of outages. Along with the pipe replacement two large meter pits were removed, and individual building water meters were installed.

SPECIAL HEALTH INFORMATION AVAILABLE

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 (800-426-4791).



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 systems 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

LEAD AND COPPER

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than others in the community because of materials used in your home's plumbing system. If you are concerned about elevated lead levels in your home's water,

you may have your water tested and, also, flush your tap for 30 seconds to two minutes before using it for drinking. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

CUSTOMER QUESTIONS WELCOME

Numerous opportunities exist to learn more about the GWU and water quality. If you have any questions about drinking water quality, this report, tour information or public works committee meetings, please call (262) 250-4703 or (262) 250-4720

SOURCE OF GERMANTOWN'S DRINKING WATER

Germantown draws drinking water from both the sandstone and limestone aquifers, a groundwater source, via five wells. The GWU owns the land around these wells and restricts any activity that could lead to contamination. As water flows through rivers and lakes and over land surfaces, naturally occurring substances may be dissolved into the water. Animals and human activities also may affect the water. These substances are then called contaminants. Not all contaminants are harmful.



For example, the following contaminants might exist in “untreated” water. Inorganic contaminants, such as salts and metals; biological contaminants, such as viruses, protozoa and bacteria;

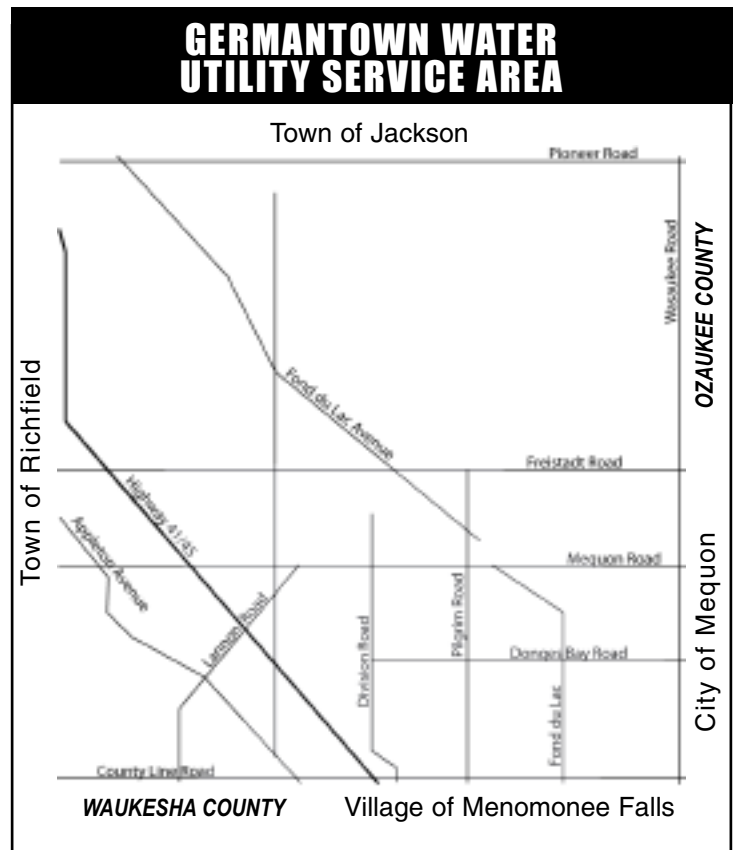
organic chemicals from industrial or petroleum use; pesticides and herbicides; and radioactive materials. To ensure tap water is safe to drink, the EPA and WDNR prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. The GWU is in compliance with all EPA and WDNR standards.

Drinking water (including bottled water) may be reasonably 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 Safe Drinking Water Hotline at (800) 426-4791.

COSTS OF LEAKY PIPES

SIZE OF HOLE	GALS/MIN	GALS/DAY	GALS/YR	COST/YR
(0.1 INCH)	2.1	3,012	1,099,246	\$ 2,198
(0.2 INCH)	8.4	12,047	4,396,983	\$ 8,793
(0.3 INCH)	18.8	27,105	9,893,211	\$ 19,786
(0.4 INCH)	33.5	48,186	17,587,930	\$ 35,175

Above based on 60PSI and \$2 per 1000 gallons pumping cost. If leak is escaping into a sanitary main, these costs will more than double.
(Numbers will vary slightly due to rounding).



TREATED WATER QUALITY

Listed on the following pages are contaminants detected in Germantown's drinking water during 2011.

The state allows the GWU 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 representative, are more than one year old.

HOW TO READ THE ANNUAL GERMANTOWN WATER QUALITY TABLE

- 1 Read the definitions on the back page to better understand this table.
- 2 Choose a “Contaminant” on the table.
- 3 Check the “Ideal Goal” (Maximum Contaminant Level Goal) for that substance.
- 4 Note the “Highest Level Allowed” (Maximum Contaminant Level).
- 5 Compare the contaminant “Level Detected” in Germantown’s water supply to the Ideal Goal and the Highest Level Allowed.

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DISINFECTION BYPRODUCTS

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL FOUND	RANGE	SAMPLE DATE (if prior to '11)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
HAA5 (ppb)	60	60	2	nd-2		NO	
TTHM (ppb)	80	0	6.9	1.1-6.9		NO	By-product of drinking water chlorination

INORGANIC CONTAMINANTS *

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL FOUND	RANGE	SAMPLE DATE (if prior to '11)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Antimony (ppb) Total	6	6	.1	nd-.1		NO	Discharge from petroleum refineries; fire retardants; ceramics; electronics; and solder
Arsenic (ppb)	10	n/a	1	nd-1		NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.120	.060-.120		NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cadmium	5	5	.2	nd-2		NO	Corrosion of galvanized pipes; Erosion of Natural deposits; Discharge from metal refineries; Runoff from waster batteries and paints
Copper (ppm)	AL=1.3	1.3	.5000	0 of 30 results were above the action level		NO	Runoff from waste batteries and paints Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	1.3	.6-1.3		NO	Leaching from wood preservatives Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	AL=15	0	7.60	1 of 30 results were above the action level		*	Corrosion of household plumbing systems; Erosion of natural deposits
Nickel (ppb)	100		5.3000	1.4000-5.3000		NO	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
Nitrate (NO3-N) (ppm)	10	10	1.10	nd-1.10		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppm)	50	50	4	nd-4		NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (ppm)	n/a	n/a	27.00	5.00-27.00	06/24/2008	NO	n/a

* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the NUMBER of sites or the actions taken to reduce these levels, please contact your water supply operator.

VOLATILE ORGANIC CONTAMINANTS

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL FOUND	RANGE	SAMPLE DATE (if prior to '11)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Dichloromethane (ppb)	5	0	.4	nd-.4		NO	Discharge from pharmaceutical and chemical factories

continued on next page

UNREGULATED CONTAMINANTS

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL FOUND	RANGE	SAMPLE DATE (if prior to '11)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Bromodichloromethane (ppb)	n/a	n/a	2.10	.46-2.10		NO	n/a
Chloroform (ppb)	n/a	n/a	2.60	.29-2.60		NO	n/a
Dibromochloromethane (ppb)	n/a	n/a	2.20	.37-2.20		NO	n/a
Sulfate (ppm)	n/a	n/a	100.00	58.00-100.00		NO	n/a

RADIOACTIVE CONTAMINANTS

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL FOUND	RANGE	SAMPLE DATE (if prior to '11)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Combined Uranium (ug/l)	30	0	.05	nd-.05		NO	Erosion of natural deposits
Gross Alpha, EXCL. R&U (pCi/l)	15	0	3.8	-.3-3.8		NO	Erosion of natural deposits
Gross Alpha, INCL. R&U (n/a)	n/a	n/a	3.8	nd-3.8		NO	Erosion of natural deposits
Radium, (226+228) (pCi/l)	5	0	5.3	1.5-5.3		NO	Erosion of natural deposits

DEFINITIONS

AL = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

MFL: million fibers per liter

mrem/year: millirems per year (a measure of radiation absorbed by the body).

NTU: Nephelometric Turbidity Units

pCi/l: Picocuries per liter (a measure of radioactivity).

ppm: Parts per million, or micrograms per liter (mg/l).

ppb: Parts per billion, or micrograms per liter (ug/l).

ppt: parts per trillion, or nanograms per liter.

ppq: parts perquadrillion, or picograms per liter

TCR: Total Coliform Rule.

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

* Each contaminant range is from no detect (nd) to the maximum reported value.

