



Village of Germantown

...Willkommen



DEPARTMENT OF PUBLIC WORKS



ANNUAL GERMANTOWN WATER QUALITY REPORT

WATER QUALITY MEETS ALL REGULATORY STANDARDS

In the year 2006, the Germantown Water Utility (GWU) conducted more than 1687 tests for about 400 contaminants 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 2006. 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

GWU installed and brought on line a radium removal treatment system this past year. The system brought well three into compliance with safety regulations. An upgraded distribution system fitted with new relays ensured a more readily available and stable water supply, reducing the impact consumers might have experienced in the past with the old distribution system technology. The search for additional well sites continues after exploration of multiple sites last year proved unable to provide high enough volume needed to support the consumer demand in the village.



SPECIAL HEALTH INFORMATION AVAILABLE

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 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 EPA's Safe Drinking Water Hotline at (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 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.



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.

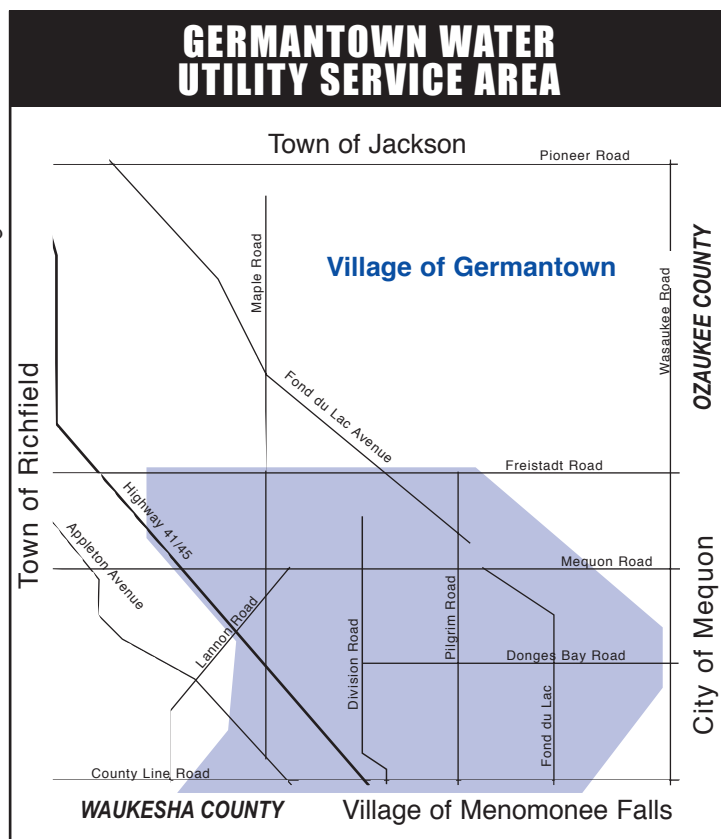
Drinking water (including bottled water) may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791.

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

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 2006.

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.

ANNUAL GERMANTOWN WATER QUALITY REPORT

DISINFECTION BYPRODUCTS

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	SAMPLE DATE (if prior to '06)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
HAA5 (ppb)	60	60	0 (avg.)	nd-1		NO	

INORGANIC CONTAMINANTS*

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	SAMPLE DATE (if prior to '06)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Arsenic (ppb)	10	n/a	1 (avg.)	0-1	08/18/2005	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	.095 (avg.)	.057-.095	08/18/2005	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	2 (avg.)	1-3	08/09/2005	NO	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (ppm)	AL=1.3	1.3	.24 (avg.)	.0140-.4700	07/20/2005	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	1.0 (avg.)	.7-1.3		NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	AL=15	0	10 (avg.)	00-14.00	07/20/2005	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Nickel (ppb)	100		10.0000 (avg.)	2.6000-10.0000	08/18/2005	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	.29 (avg.)	nd -.50		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (NO2-N) (ppm)	1	1	.019	.000 -.019	08/09/2005	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	n/a	n/a	27.00 (avg.)	8.00-27.00	08/18/2005	NO	n/a

RADIOACTIVE CONTAMINANTS*

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	SAMPLE DATE (if prior to '06)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Gross Alpha, excl. R&U (pCi/l)	15	0	7.7	7.7	06/14/2004	YES	Erosion of natural deposits.
Radium (226 +228) (pCi/l)	5	0	2.8 (avg.)	2.8	09/14/2004	NO	Erosion of natural deposits

UNREGULATED CONTAMINANTS*

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	SAMPLE DATE (if prior to '06)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Bromodichloromethane (ppb)	n/a	n/a	.39 (avg.)	nd-1.50		NO	n/a
Bromoform (ppb)	n/a	n/a	.16 (avg.)	nd-.66		NO	n/a
Chloroform (ppb)	n/a	n/a	.28 (avg.)	nd-1.10		NO	n/a
Dibromochloromethane (ppb)	n/a	n/a	.46 (avg.)	nd-1.60		NO	n/a
Sulfate (ppm)	n/a	n/a	190.00 (avg.)	62.00-190.00	08/09/2005	NO	n/a

***Please note:** 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.

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VOLATILE ORGANIC CONTAMINANTS *

CONTAMINANT (Units)	MCL (Highest Level Allowed)	MCLG (Ideal Goals)	LEVEL DETECTED	RANGE	SAMPLE DATE (if prior to '05)	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
TTHM (ppm)	80	0	1.3 (avg)	nd-4.7		NO	By-product of drinking water chlorination

HEALTH EFFECTS FOR ANY CONTAMINANTS WITH MCL VIOLATIONS

CONTAMINANT (Units)	HEALTH EFFECTS
Gross Alpha, Excl. R & U	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

MONITORING AND REPORTING VIOLATIONS

CONTAMINANT GROUP	SAMPLE LOCATION	COMPLIANCE PERIOD BEGINNING*	COMPLIANCE PERIOD ENDING	
Volatile Organic Contaminants	5	04/01/2006	06/30/2006	*Monitoring and reporting violations occur when a water system fails to collect and/or report results for State required drinking water sampling. "Sample location" refers to the distribution system, or an entry point or well number from which a sample is required to be taken.

Volatile Organic Contaminants that were missed include: 1,1,1,2-Tetrachloroethane; 1,1,1-Trichloroethane; 1,1,2,2-Tetrachloroethane; 1,1,2-Trichloroethane; 1,1-Dichloroethane; 1,1-Dichloroethylene; 1,1-Dichloropropene; 1,2,3-Trichloropropane; 1,2,4-Trichlorobenzene; 1,2-Dichloroethane; 1,2-Dichloropropane; 1,3-Dichloropropane; 1,3-Dichloropropene; 2,2-Dichloropropane; Benzene; Bromobenzene; Bromodichloromethane; Bromoform; Bromomethane; Carbon Tetrachloride; Chloroethane; Chloroform; Chloromethane (Methylchloride); Cis-1,2-Dichloroethylene; Dibromochloromethane; Dibromomethane; Dichloromethane; Ethylbenzene; M-Dichlorobenzene; Monochlorobenzene (Chlorob.); O-Chlorotoluene; O-Dichlorobenzene; P-Chlorotoluene; P-Dichlorobenzene; Styrene; Tetrachloroethylene; Toluene; Trans-1,2-Dichloroethylene; Trichloroethylene; Vinyl Chloride; Xylenes, Total

DEFINITIONS

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

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed by law in drinking water.

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

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

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

ppm: Parts per million.

ppb: Parts per billion.

TCR: Total Coliform Rule.

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