Report on Drinking Water Quality

2006 Consumer Confidence Report

DELAFIELD WATERWORKS

Water System Information

In 2006 The City of Delafield's water distribution system consisted of one 1,215 foot deep municipal well, one 106,000 gallon underground storage reservoir, one 500,000 gallon above ground storage reservoir, one pressure booster station, 40,063 lineal feet of water main, 126 distribution valves and 95 fire hydrants. This does not include the new well # 2 pump station & reservoir and the STH 83 water main extension, which will be put into service in the calendar year 2007. The water system pumps approximately 52,806,000 gallons of water annually to 80 Commercial Customers and 14 Residential Customers located in the South East quadrant of the city near Hwy 83 and I-94.

Customer Questions

If you would like to learn more, please attend any of our regularly scheduled meetings. The Common Council meets on the 1st and 3rd Monday of each month at 7:00 P.M. The Public Works Committee meets on the 1st Wednesday of each month at 6:30 P.M. All meetings are held in the Council Chambers at the Delafield City Hall located at 500 Genesee Street. If you would like to know more about the information contained in this report, please contact Paul Zellner, Water Utility Foreman at (262) 646-6225- ext. 802 or contact City Hall at (262) 646-6220.

Health Information

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 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Source of Water

Source id	Source	Depth (feet)
1	Groundwater	1,215

A summary of the source water assessment for DELAFIELD WATERWORKS is available at.

http://prodmtex00.dnr.state.wi.us/pls/inter1/pk swap web.p swap summary?i ro seq no=4040431

The assessment identifies land areas that contribute water to each system, significant potential contaminant sources within those area and the susceptibility of the drinking water systems to contamination.

Educational Information

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 stormwater 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 stormwater runoff and residential uses.
- 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 stormwater runoff and septic systems.
- 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Number of Contaminants Required to be Tested

This table displays the number of contaminants that were required to be tested in the last five years. The consumer confidence report may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	# of Contaminants
Disinfection Byproducts	1
Inorganic Contaminants	16
Microbiological Contaminants	1
Radioactive Contaminants	2
Unregulated Contaminants	4
Volatile Organic Contaminants	21

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2006)	Violation	Typical Source of Contaminant
BARIUM (ppm)	2	2	.120	.120	3-15-2005	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CADMIUM (ppb)	5	5	.7	.7	3-15-2005	NO	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; run off from waste batteries and paints
COPPER (ppm)	AL=1.3	1.3	.1905	.0550-.2090	3-15-2005	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	.4	.4	3-15-2005	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	6.85	Nd-11.00	3-15-2005	NO	Corrosion of household plumbing systems; Erosion of natural deposits
NITRATE (NO3-N ppm)	10	10	.01 (Average)	Nd-.02		NO	Run off from fertilizers; Leaching from septic tanks, sewage, erosion of natural deposits
SODIUM (ppm)	n/a	n/a	5.40	5.40	3-15-2005	NO	n/a

Unregulated Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2006)	Violation	Typical Source of Contaminant
BROMODICHLOROMETHANE (ppb)	n/a	n/a	.13	.13	7-19-2004	NO	n/a
CHLOROFORM (ppb)	n/a	n/a	.30	.30	7-19-2004	NO	n/a

Volatile Organic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2006)	Violation	Typical Source of Contaminant
TTHM (ppb)	80	0	.4	.4	7-19-2004	NO	By product of Drinking water chlorination

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2006)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	12.0	8.2-12.0	9-7-2004	NO	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)	5	0	5.85 (Average)	4.6-7.8		Yes*	Erosion of natural deposits

* The City of Delafield Water Utility is currently installing a blending well in the north east quadrant of the City. The new well will blend with the current well to reduce the radium concentration to an acceptable level and to provide quality water to the customers and visitors of the City of Delafield.

Health effects for any contaminants with MCL violations

Contaminant	Health Effects
RADIUM, (226 + 228)	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Definition of Terms

Term	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL	Maximum Contaminant Level: 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.
MCLG	Maximum Contaminant Level Goal: 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.
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 milligrams per liter (mg/l)
ppb	parts per billion, or micrograms per liter (ug/l)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, 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.