

2009 Consumer Confidence Report

DE PERE WATER DEPARTMENT

PWS ID 40504530

OVERVIEW

The City of De Pere Water Utility is proud of the water and service that we provide to our customers. This annual report provides us an opportunity to explain our operation and provides information regarding the water we supply and how it may affect your health. We hope that this information will allow you to make informed choices. We are committed to provide a safe, efficient, and reliable water system. We hope that you find this information useful and invite your questions or comments.

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 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).

SOURCE(S) OF WATER

| Source id | Source | Depth (in feet) | Status |
|-----------|-------------------------|-----------------|-----------|
| 3 | Groundwater | 794 | Active |
| 4 | Groundwater | 871 | Active |
| 5 | Groundwater | 863 | Active |
| 6 | Groundwater | 787 | Emergency |
| 5 | Purchased Surface Water | Lake Michigan | Active |
| 6 | Purchased Surface Water | Lake Michigan | Active |
| 7 | Purchased Surface Water | Lake Michigan | Active |

SYSTEM NEWS

During 2009, the City continued our replacement of older water lines focusing on those in areas that we will be reconstructing roads or are experiencing excessive water main breaks. The areas water main was replaced was along Lande Street, Ridgeway Boulevard, Erie Street, and Wisconsin Street.. A total of 4,958 lineal feet of existing water main was replaced. The City also installed 961 lineal feet of new water main on Killarny Trail. The City also had a complete inspection of the Merrill Street Water Tower as required by the Wisconsin Department of Natural Resources. The City also continued with its annual hydrant replacement program and replaced 10 hydrants.

In 2010, work will focus on approximately 7,000 lineal feet of water main replacements along CTH PP, Ash Street, Huron Street, and Rideway Boulevard. The City will also be doing inspections of the 9th Street Tower and reservoir, Merrill Street reservoir, and Scheuring Road reservoir as required by the Wisconsin Department of Natural Resources (DNR) every five (5) years. In addition, the City will be doing a system surge analysis study and river crossing stability assessment. We will also continue the hydrant replacement program which will entail replacing existing fire hydrants.

In 2010 the City intends to implement a residential cross connection inspection program. The City is required by the Wisconsin Department of Natural Resources per the Wisconsin Administrative Code 811.09 to develop and implement a residential cross connection control program. The purpose of the cross connection program is to ensure that the City provides and protects the water distribution system for safe drinking water. The residential cross connection program will inspect private plumbing of residential properties to make sure they cannot contaminate the City's water system. The program is intended to inspect every residential home over the next ten (10) years.

Water quality data for Lake Michigan Water can be obtained from the WDNR by calling 662-5188 or on-line at [http://prodoasext.dnr.wi.gov/inter1/pws2\\$.startup](http://prodoasext.dnr.wi.gov/inter1/pws2$.startup) Just type in City's name and click "find", to obtain data.

If you have any questions you may contact Dan Carpenter, Water Foreman at 339-4063 or Scott Thoresen, Director of Public Works at 339-8095 or Larry Delo, City Administrator, and De Pere's representative on the water authority at 339-4044.

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 storm water 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 production, and can also come from gas stations, urban storm water 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 CCR 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 | 2 |
| Inorganic Contaminants | 17 |
| Microbiological Contaminants | 3 |
| Radioactive Contaminants | 3 |
| Synthetic Organic Contaminants including Pesticides and Herbicides | 29 |
| Unregulated Contaminants | 34 |
| Volatile Organic Contaminants | 20 |

DISTRIBUTION SYSTEM SAMPLING RESULTS

Microbiological Contaminants

| Contaminant | MCL | MCLG | Count of Positives | Sample Date (if prior to 2009) | Violation | Typical Source of Contaminant |
|--------------------|--|-------------|---------------------------|---------------------------------------|------------------|--------------------------------------|
| Coliform (TCR) | presence of coliform bacteria in $\geq 5\%$ of monthly samples | 0 | 1 | | NO | Naturally present in the environment |

Disinfection Byproducts

| Contaminant (Units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Typical Source of Contaminant |
|---------------------|-----|------|-------------|-------------|------------------------------|---|
| HAA5 (ppb) | 60 | 60 | 0.091 | 0.01-0.091 | | By-product of drinking Water chlorination |
| TTHM (ppb) | 80 | 0 | 0.083 | 0.017-0.083 | | By-product of drinking Water chlorination |

*These samples were collected in order to determine future sampling locations under Stage 2 of EPA's Disinfection By-Products Rule.

Lead and Copper

| Contaminant (units) | MCL | MCLG | 90 th Percentile | Range | Sample Date (if prior to 2009) | Violation | Typical Source of Contaminant |
|---------------------|--------|------|-----------------------------|---|--------------------------------|-----------|--|
| COPPER (ppm) | AL=1.3 | 1.3 | .42 | 0 of 30 results were above the action level | | NO | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| LEAD (ppb) | AL=15 | 0 | 1.40 | 0 of 30 results were above the action level | | * | Corrosion of household plumbing systems; Erosion of natural deposits |

* 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 Water Foreman Dan Carpenter, 339-4063.

Unregulated Contaminants

| Contaminant (units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Violation | Typical Source of Contaminant |
|----------------------------|-----|------|-------------|-----------|------------------------------|-----------|-------------------------------|
| BROMODICHLOROMETHANE (ppb) | n/a | n/a | 5.65 | 5.32-6.2 | | NO | n/a |
| BROMOFORM (ppb) | n/a | n/a | 0 | 0 | | NO | n/a |
| DIBROMOCHLOROMETHANE (ppb) | n/a | n/a | 3.25 | 2.98-3.43 | | NO | n/a |
| SULFATE (ppm) | n/a | n/a | 20.4 | 20.4 | | NO | n/a |

SURFACE WATER SAMPLING RESULTS

Inorganic Contaminants

| Contaminant (units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Violation | Typical Source of Contaminant |
|---------------------------------------|------------|-------------|------------------------|--------------|---|------------------|--|
| ARSENIC (ppb) | 10 | n/a | 1 | 1 | | NO | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| BARIUM (ppm) | 2 | 2 | 0.19 | .19 | | NO | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| FLUORIDE (ppm) | 4 | 4 | .9 | .9 | | NO | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| NITRATE (NO ₃ -N) (ppm) | 10 | 10 | .25 | .25 | | NO | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| SODIUM (ppm) | n/a | n/a | 7.23 | 7.23 | | NO | n/a |

Radioactive Contaminants

| Contaminant (Units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Violation | Typical Source of Contaminant |
|--|------------|-------------|------------------------|--------------|---|------------------|--|
| GROSS ALPHA, EXCL. R & U (pCi/l) | 15 | 0 | 2.0 | 2.0 | | NO | Erosion of natural deposits |
| GROSS ALPHA, INCL. R & U (n/a) | n/a | n/a | 2.0 | 2.0 | | NO | Erosion of natural deposits |
| RADIUM, (226 + 228)(pCi/l) | 5 | 0 | .75 | .75 | | NO | Erosion of natural deposits |

Unregulated Contaminants

| Contaminant (units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Violation | Typical Source of Contaminant |
|----------------------------|-----|------|-------------|-----------|------------------------------|-----------|-------------------------------|
| BROMODICHLOROMETHANE (ppb) | n/a | n/a | 5.20 | 3.83-6.2 | | NO | n/a |
| BROMOFORM (ppb) | n/a | n/a | .48 | .48 | | NO | n/a |
| CHLOROFORM (ppb) | N/a | N/a | 4.40 | 2.59-5.37 | | | |
| DIBROMOCHLOROMETHANE (ppb) | n/a | n/a | .3.16 | 2.9-3.43 | | NO | n/a |
| SULFATE (ppm) | n/a | n/a | 20.4 | 20.4 | | NO | n/a |

ADDITIONAL HEALTH INFORMATION

Our water is monitored for *cryptosporidium*, a microbial parasite naturally found in surface water throughout the world. If ingested, *cryptosporidium* can cause intense gastrointestinal distress in otherwise healthy people. In accordance with the EPA Rule LT2ESWTR, Manitowoc Public Utilities (MPU) is required to sample the Lake Michigan raw water source monthly for Cryptosporidium. Of the twelve months that were sampled in 2009, four of the raw water samples detected Cryptosporidium, all of which were at or below 0.9 oocysts/L. However, MPU's the state-of-the-art Microfiltration Water Treatment Plant provides an absolute physical barrier to water borne pathogens such as Cryptosporidium and Giardia. This membrane process ensures that Cryptosporidium is not present in your drinking water.

WELL WATER SAMPLING RESULTS

Inorganic Contaminants

| Contaminant (units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Violation | Typical Source of Contaminant |
|----------------------|-----|------|-------------|---------|------------------------------|-----------|--|
| ANTIMONY TOTAL (ppb) | 6 | 6 | .2 | .15-.2 | 2008 | NO | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder |
| ARSENIC (ppb) | 10 | n/a | .98 | .65-.98 | 2008 | NO | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |

| | | | | | | | |
|-----------------------|-----|-----|-----|---------|------|----|---|
| BARIUM (ppm) | 2 | 2 | 25 | 19-25 | 2008 | NO | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| CHROMIUM (ppb) | 100 | 100 | 1.2 | .82-1.2 | 2008 | NO | Discharge from steel & pulp mills; Erosion of natural deposits |
| FLUORIDE (ppm) | 4 | 4 | 1.8 | 1.4-1.8 | 2008 | NO | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| NICKEL | 100 | | 1.4 | 1.3-1.4 | 2008 | NO | Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products |
| NITRATE (N03-N) (ppm) | 10 | 10 | .35 | .33-.35 | 2009 | NO | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| SODIUM (ppm) | n/a | n/a | 11 | 8.1-11 | 2008 | NO | n/a |

Radioactive Contaminants

| Contaminant (Units) | MCL | MCLG | Level Found | Range | Sample Date if Prior to 2009 | Violation | Typical Source of Contaminant |
|----------------------------------|-----|------|-------------|-------|------------------------------|-----------|-------------------------------|
| GROSS ALPHA, EXCL. R & U (pCi/l) | 15 | 0 | 4.3 | 0-4.3 | 2008 | NO | Erosion of natural deposits |
| GROSS ALPHA, INCL. R & U (n/a) | n/a | n/a | 4.3 | 0-4.3 | 2008 | NO | Erosion of natural deposits |
| RADIUM, (226 + 228)(pCi/l) | 5 | 0 | 3.1 | 0-3.1 | 2008 | NO | Erosion of natural deposits |

MONITORING AND REPORTING VIOLATIONS

| Contaminant Group | Sample Location | Compliance Period |
|-------------------|---------------------|-------------------------|
| Coliform Bacteria | Distribution System | 12/01/2009 – 12/31/2009 |

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.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. Between 12/01/2009 and 12/31/2009 we failed to collect one of twenty-five required monthly coliform bacteria samples from the distribution system. This problem was identified immediately and the sample was collected and results were reported for the required distribution coliform bacterial compliance on January 5, 2010. There are no special precautions you need to take at this time.

If you have questions regarding the safety of our drinking water, please contact Dan Carpenter, Foreman, 339-4063.

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. |

NATIONAL PRIMARY DRINKING WATER REGULATION COMPLIANCE

Scott Thoresen, P.E., Director of Public Works, and Dan Carpenter, De Pere Water Service Worker Foreman prepared this report, with technical assistance provided by the Wisconsin Department of Natural Resources.

Water quality data for community water systems in the State of Wisconsin is available at <http://www.dnr.state.wi.us/org/water/dwg/dws.htm>. Select “Public Systems.” At the next screen enter only the “City Name” of the water system you are looking for. Entering additional information may cause problems.

June 15, 2010

Dear Water System Customer:

In compliance with the Safe Drinking Water Act, the City of De Pere Public Works Water Utility is pleased to provide you with the attached Consumer Confidence Report (CCR).

This document provides information about the water supply to help you make informed decisions. Specific information includes where the water comes from, contaminants present in the water, and the risks our water testing and treatment are designed to identify and prevent. We are committed to provide the safest and most reliable water that we can. We believe that our best partners in this process are informed customers.

If you have any questions regarding the Consumer Confidence Report, please feel free to call either of us.

Sincerely,

Scott Thoresen, PE
Director of Public Works
(920)339-4072 ext. 2255

Dan Carpenter
Water Service Worker Foreman
(920)339-4072 ext. 2221