# Village of Grantsburg - 2009 Quality Water Report
# June 2010

We're pleased to present to you this year's Annual Quality Water Report. This publication conforms to the federal regulation requiring water utilities to provide this information annually. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination that could affect our wells. A summary of the susceptibility of each system is also available on the DNR website. Grantsburg has three 150-foot deep groundwater wells located within the village. I'm pleased to report that our drinking water is safe and meets federal and state requirements.

***If you have any questions about this report or concerning your water utility, please contact Paul Solie at the Village Shop between 8:00 a.m. – 4:30 p.m. Monday – Friday, 715-463-5670.*** We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of every month at the Village Hall beginning at 5:00 p.m. unless posted otherwise.

Grantsburg Waterworks routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2009 or from the most recent testing done in accordance with the regulations. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

The sources of drinking water, both tap and bottle 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.

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. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The groundwater that supplies Grantsburg's water contains iron and manganese. These natural elements do not impose any kind of health risk but in certain parts of town will cause an aesthetic problem. Characteristics of iron and manganese are red, brown or yellow staining of laundry, glassware, dishes and household fixtures such as bathtubs and sinks.

The water may also have a metallic taste and offensive odor. Grantsburg uses sixty (60) million gallons of water yearly. Removal of the iron and manganese from the water would be very expensive. Grantsburg Waterworks is trying to sequester the iron and manganese to help suppress the problem.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

| Contaminant (units) | MCL | MCLG | Level Found | Range | Sample Date (if prior to 2008) | Violation | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| HAA5 (ppb) | 60 | 60 | 12 | 12 | | NO | |
| ARSENIC (ppb) | 10 | n/a | 1 | Nd-1 | 3/11/2008 | NO | Erosion of natural deposits; run off from orchards; run off from glass & electronics production wastes. |
| BARIUM (ppm) | 2 | 2 | .075 | .061-.075 | 3/11/2008 | NO | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| COPPER (ppm) | AL=1.3 | 1.3 | .2600 | 0 of 10 results were above the action level | 4/22/2008 | NO | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| CHROMIUM (ppb) | 100 | 100 | 1 | 1-1 | 3/11/2008 | NO | Discharge from steel and pulp mills; |

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| | | | | | | | erosion of natural deposits. |
| NITRATE (ppm) | 10 | 10 | Nd | Nd-.03 | | NO | Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| FLUORIDE (ppm) | 4 | 4 | .4 | .3-.4 | 3/11/2008 | NO | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| LEAD (ppb) | AL=15 | 0 | 1.60 | 0 of 10 results were above the action level | 4/22/2008 | NO | Corrosion of household plumbing systems; Erosion of natural deposits |
| TRIMETHYLBENZENE (ppb) | n/a | n/a | .20 | .20 | | NO | n/a |
| NICKEL (ppb) | 100 | | 3.9000 | 1.6000-3.9000 | 3/11/2008 | NO | Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products. |
| SODIUM (ppm) | n/a | n/a | 22.00 | 15.00-22.00 | 3/11/2008 | NO | n/a |
| BROMODICHLOROMETHANE (ppb) | n/a | n/a | 1.35 | 1.00-1.70 | | NO | n/a |
| CHLOROFORM (ppb) | n/a | n/a | 10.80 | 8.60-13.00 | | NO | n/a |
| RADIUM (pCi/l) | 5 | 0 | 2.1 | 1.3-2.1 | | NO | Erosion of natural deposits. |
| TTHM (ppb) | 80 | 0 | 12.2 | 9.6-14.7 | | NO | By-product of drinking water Chlorination |

**Definitions: 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 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 contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. **PCi/l – Picocuries per liter**: a measure of radioactivity. **Ppm** – parts per million. **Ppb –** parts per billion **MFL-**million fibers per liter. **mrem/year-**millirems per year (a measure of radiation absorbed by the body). **NTU-**Nephelometric Turbidity Units. **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.

Contaminants Tested: 16 Inorganic, 2 disinfection byproduct, 4 Unregulated, 2 Microbiological, 20 Volatile Organic, 3 Radioactive and 25 Synthetic Organic