

Quality On Tap!

Our Commitment  Our Profession

City Of Gothenburg

Annual Water Quality Report For January 1 to December 31, 2010

This report is intended to provide you with important information about your drinking water and the efforts made by the City Of Gothenburg water system to provide safe drinking water.

Para Clientes Que Hablan Español:

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

For more information regarding this report, contact:

Shane D Gruber
308-537-3668

If you would like to observe the decision-making processes that affect drinking water quality, please attend the regularly scheduled meeting of the Village Board/City Council. If you would like to participate in the process, please contact the Village/City Clerk to arrange to be placed on the agenda of the meeting of the Village Board/City Council.

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 EPA's Safe Drinking Water Hotline (800-426-4791).

Source Water Assessment Availability:

The Nebraska Department of Environmental Quality (NDEQ) has completed the Source Water Assessment. Included in the assessment is a Wellhead Protection Area map, potential contaminant source inventory, vulnerability rating, and source water protection information. To view the Source Water Assessment or for more information please contact the person named on the cover of this report or NDEQ at (402) 471-6988.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Sources of Drinking Water:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

The source of water used by City Of Gothenburg is ground water.

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.

Drinking Water Health Notes:

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 Safe Drinking Water Hotline (800-426-4791).

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 at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about

elevated lead levels in your home's water, you may wish to have your water tested. Flushing your tap for 30 seconds to 2 minutes before using your tap water will clear the line of any lead that may have leached into the water while the line was idle. Additional information is available from the Safe Drinking Water Hotline (800-426-4791) or the Department of Health and Human Services/Division of Public Health/Office of Drinking Water (402-471-2541).

The City Of Gothenburg is required to test for the following contaminants: Coliform Bacteria, Antimony, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium, Thallium, Atachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Dibromochloropropane, Dinoseb, Di(2-ethylhexyl)phthalate, Diquat, 2,4-D, Endothall, Endrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor, epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated biphenyls, Simazine, Toxaphene, Dioxin, Silvex, Benzene, Carbon Tetrachloride, o-Dichlorobenzene, Para-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, Cis-1,2-Dichloroethylene, Trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Monochlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Styrene, Tetrachloroethylene, Toluene, Xylenes (total), Gross Alpha (minus Uranium & Radium 226), Radium 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chlorobenzene, m-Dichlorobenzene, 1,1-Dichloropropene, 1,1-Dichloroethane, 1,1,2,2-Tetrachloroethane, 1,2-Dichloropropane, Chloromethane, Bromomethane, 1,2,3-Trichloropropane, 1,1,1,2-Tetrachloroethane, Chloroethane, 2,2-Dichloropropane, o-Chlorotoluene, p-Chlorotoluene, Bromobenzene, 1,3-Dichloropropene, Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Propachlor.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

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

| | |
|----------------------------|--------------------------------|
| ppm: parts per million | ppb: parts per billion |
| ppt: parts per trillion | pCi/l: picoCuries per liter |
| ug/l: micrograms per liter | (Measurement of Radioactivity) |

This notice will not be mailed to

individual households.

A copy is available at the City Office.

409 9th Street

Thank you.

| Microbiological | Highest No. of Positive Samples | MCL | MCLG | Likely Source Of Contamination | Violations Present |
|-----------------|---|---|------|--------------------------------------|--------------------|
| COLIFORM (TCR) | In the month of November, 1 sample(s) were positive | MCL: Systems that Collect Less Than 40 Samples per Month - No more than 1 positive monthly sample | 0 | Naturally present in the environment | Yes |

| Lead and Copper | Monitoring Period | 90 th Percentile | Range | Unit | AL | Sites Over AL | Likely Source Of Contamination |
|-----------------|-------------------|-----------------------------|-----------------|------|-----|---------------|---|
| COPPER, FREE | 2008 - 2010 | 0.0971 | 0.00537 - 0.186 | ppm | 1.3 | 0 | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing. |

| Regulated Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG | Likely Source Of Contamination |
|------------------------|-----------------|---------------|----------------|------|-----|------|---|
| ARSENIC | 08/20/2009 | 9.47 | 8.29 - 9.47 | ppb | 10 | 0 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. |
| BARIUM | 02/11/2008 | 0.121 | 0.0975 - 0.121 | ppm | 2 | 2 | Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| CHROMIUM | 02/11/2008 | 15.2 | 12.6 - 15.2 | ppb | 100 | 100 | Discharge from steel and pulp mills; Erosion of natural deposits. |
| FLUORIDE | 02/11/2008 | 0.54 | 0.45 - 0.54 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; Fertilizer discharge. |
| NITRATE-NITRITE | 02/03/2010 | 1.3 | 0.263 - 1.3 | ppm | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

| Radiological Contaminants | Collection Date | Highest Value | Range | Unit | MCL | MCLG | Likely Source Of Contamination |
|-------------------------------|-----------------|---------------|-----------|-------|-----|------|--------------------------------|
| COMBINED RADIUM (-226 & -228) | 10/13/2010 | 0.5 | 0.3 - 0.5 | pCi/l | 5 | 0 | Erosion of natural deposits |
| GROSS ALPHA, INCL. RADON & U | 01/05/2010 | 6.1 | 3.8 - 6.1 | pCi/l | 15 | 0 | Erosion of natural deposits |
| RADIUM-226 | 10/13/2010 | 0.5 | 0.3 - 0.5 | pCi/l | 5 | 0 | Erosion of natural deposits |

| Unregulated Water Quality Data | Collection Date | Highest Value | Range | Unit | Secondary MCL |
|--------------------------------|-----------------|---------------|-------------------|------|---------------|
| NICKEL | 10/21/2009 | 0.00158 | 0.00129 - 0.00158 | mg/l | 0.1 |
| SULFATE | 10/21/2009 | 69 | 36 - 69 | mg/l | 250 |

During the 2010 calendar year, we had the below noted violation(s) of drinking water regulations.

| Type | Category | Analyte | Compliance Period |
|--------------|-------------------------------------|---------|-------------------------|
| MCL, AVERAGE | Maximum Contaminant Level Violation | ARSENIC | 04/01/2010 - 06/30/2010 |

The City Of Gothenburg has taken the following actions to return to compliance with the Nebraska Safe Drinking Water Act:

The City of Gothenburg by the direction of the NE. Health and Human Services, Public Health Division, has discontinued the use of the GMW 72-1 Well at 16th Street and Avenue G because of high Arsenic levels. The well can only be used in an emergency with NHHS being notified 24 hours prior to its use to put water in the distribution system.

Additional Required Health Effects Language:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

The City of Gothenburg Utilities Department would like to take this opportunity to make citizens aware of water quality concerns associated with cross connections.

A cross-connection is a connection between potable or drinking water and any sewer drain or other contaminate. Contaminates could be pesticides, solvents, cleaners, or even soil contaminated by pets or chemicals.

Springtime is the time of the year that residents break out their garden hoses. Garden hoses are probably the most often used form of cross-connection. The little spray bottle that attaches to the garden hose and contains pesticide or herbicide is also a connection to yours and your neighbor's drinking water. A hose bib vacuum breaker on the faucet would protect your potable water from backflow if the pressure in your home water supply would drop while you are using these devices.

Another example of how garden hoses are used is flushing out ground squirrels, unclogging sewer drains, and cleaning gutters. Power washers and even a bucket of soapy water with the hose left running into it while washing the car could allow for these contaminants to back siphon into your plumbing system. If this is a problem why doesn't it happen all the time? This problem could occur when the pressure in the water supply is lost or lowered. A plumbing break or a fire where a large volume of water is needed are two ways that this could happen.

Another possible cross connection is an underground sprinkler system without a vacuum breaker. Even a small crack or split in the line may not be noticed but could still aspirate some contaminants into the system. Underground sprinkler companies have helped eliminate this concern with self-draining sprinkler heads, but the real protection is the pressure vacuum breaker that won't allow contaminated water into your potable water system.

Finally, beware of new devices on the market that allow the application of fertilizer or pesticides through your lawn sprinkler system. State law requires a higher degree of protection with more elaborate backflow prevention devices to isolate the increased threat that these lawn treatments pose.

For more information regarding the possibility and protection from backflow contact Shane Gruber, City Services Director, at 1-308-537-3668.