

2012 Water Quality Report for the Genoa Charter Township – Oak Pointe Water System

This report covers the drinking water quality report for the Oak Pointe and Northshore Communities. You can obtain a copy of the report at the Genoa – Township Hall, by calling us at 810-227-5225, or by printing a copy from the website at www.genoa.org.

This information provides a summary of the quality of the drinking water supplied in 2012.

As a reminder, if you have any water or sewer emergencies during the year, please call 1-888-481-0439. Assistance is available 24 hours a day.

Keeping You Informed

The Genoa Charter Township Oak Pointe Water System provides drinking water for the Oak Pointe and Northshore Communities, and we are pleased to report that drinking water in this system complied with all Environmental Protection Agency (EPA) and Michigan drinking water health standards for the latest sampling period. This report follows the guidelines set by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ). Our goal is to continue to provide you with a safe and dependable water supply.

Water Quality Results

Operators from the Genoa Township Oak Pointe Water System monitor your drinking water daily according to federal and state laws.

The table shows the results of monitoring for the period from January 1 to December 31, 2012, unless otherwise noted. The test results show that your water meets or surpasses all federal and state requirements. For more information about your water call the Oak Pointe System Operator at 517-545-5098.

Special Population Advisory

You may be more vulnerable than the general population to certain microbial contaminants, such as cryptosporidium, in drinking water. Infants, some elderly or immune-compromised persons such as those undergoing chemotherapy; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791). Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte en espanol, favor del llamar al tel. (281) 579-4507 par hablar con una persona biligue en espanol.

Where Does Your Water Come From

Ground water (also called well water) is protected from many of the sources of contamination described later, such as microbes like cryptosporidium. In general, the sources of drinking water (both tap and bottled water) may 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. Source water can also be contaminated by substances resulting from animal or human activity.

Contaminants in Water

Contaminants include anything found in water. They are generally not harmful at low levels. Removing all contaminants would be extremely expensive and in nearly all cases would not provide greater protection of health. Examples of contaminants that may be present in source water in general include: 1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. 2) 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. 3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. 4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from runoff and septic systems. 5) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production or the mining process. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Oak Pointe Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Contaminants may be found in drinking water that causes taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office at 810-227-5225.

Improving Water Aesthetics

Twice per year, the water distribution system is flushed to remove iron deposits. This improves the taste of the water and helps prevent water from appearing rusty in color.

Most residents utilize a water softener to also improve the taste and appearance of their water. **Please note potassium chloride salt must be used and the water softener cannot discharge to the sewer system.**

Water Quality Monitoring

To ensure that tap water is safe to drink, the Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Drinking water (bottled or tap) may reasonably be expected to contain at least small amounts of some contaminants. The contaminants in our drinking water are primarily geological materials that dissolved while still in the aquifer. 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).

Public Input

Public input concerning the Genoa Charter Township Oak Pointe water system may be made by contacting the Genoa Township Utilities Director at 810-227-5225 for more information.

2012 Drinking Water Quality Report

The last available information for the contaminants detected in our water during the sampling cycle ending in 2012 is given in the table below. The Environmental Protection Agency (EPA) does not require some contaminants to be monitored annually because their concentrations are not expected to vary. The Michigan Department of Environmental Quality obtains and analyzes the samples in accordance with sampling cycles which vary according to EPA schedules. The definitions and abbreviations used in the table follow.

Substance (units)	Sample Date	MCL	Level Detected	Range Detected	MCLG	In Compliance	Typical Sources
<u>Inorganic Contaminants (Regulated at the Water Plant)</u>							
Chlorine residual RAA (ppm)	2012	4 MDRL	.58	.1-1.58	4 MRDLG	Yes	Water chlorination
Iron (ppm)	2012	N/A	0.55	Nd – 1.1	0	Yes	Natural deposits
Fluoride (ppm)	2012	4	0.05	ND - 0.1	4	Yes	Natural deposits; additive to prevent tooth decay
Barium (ppm)	2009	2	0.13	0.13	2	Yes	Discharge of drilling wastes & metal refineries; natural erosion
<u>Disinfectant Bi-Products</u>							
Dibromoacetic Acid (ppb)	2011	N/A	2.5	2 - 3	0	Yes	By-product of drinking water chlorination
Dichloroacetic Acid (ppb)	2011	N/A	4.5	4 - 5	0	Yes	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	2011	60	10.5	9 - 12	0	Yes	By-product of drinking water chlorination
Trichloroacetic Acid (ppb)	2011	N/A	3.5	3 - 4	0	Yes	By-product of drinking water chlorination
Chloroform (ppb)	2012	80	1.1	1.1	0	Yes	By-product of drinking water chlorination
Bromochloroacetic Acid (ppb)	2011	80	3.5	3 - 4	0	Yes	By-product of drinking water chlorination
Total Trihalomethanes (ppb)	2012	80	2.8	2.8	0	Yes	By-product of drinking water chlorination
Chlorodibromomethane (ppb)	2012	80	.6	.6	0	Yes	By-product of drinking water chlorination
Bromodichloromethane (ppb)	2012	80	1.1	1.1	0	Yes	By-product of drinking water chlorination
<u>Unregulated Contaminants</u>							
Chloride (ppm)	2012	N/A	111.5	78 - 145	N/A	Yes	Natural Erosion
Hardness CaCO ₃ (ppm)	2012	N/A	411	392 – 430	N/A	Yes	Natural Erosion
Sodium (ppm)	2012	N/A	39.5	34 – 45	N/A	Yes	Natural Erosion
Sulfate (ppm)	2012	N/A	24	24	N/A	Yes	Natural Erosion

Substance (units)	Sample Date	90th Percentile Value	EPA Action Level	Number of Results Above Action Level	MCLG	In Compliance	Typical Source
<u>Lead and Copper (Regulated at the Customer's Plumbing)</u>							
Lead (ppb)	2011	10	15	0	15	Yes	Corrosion of customer plumbing
Copper (ppm)	2011	0.61	1.3	0	1.3	Yes	Corrosion of customer plumbing

No MCL's were exceeded. Levels detected were below MCL's.

Definitions & Abbreviations:

Maximum Contaminant Level Goal (MCLG): The level of contaminants in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

Maximum residual disinfectant level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal (MRDLG): Level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants

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

Parts per million (ppm): The equivalent of milligrams per liter (mg/l) is analogous to 1 minute in 2 years.

Parts per billion (ppb): The equivalent of micrograms per liter (ug/l) is analogous to 1 second in 32 years.

Picocuries per liter (pCi/L): A measure of radioactivity.

RAA: Running Annual Average.

N/A: Not applicable. **ND:** Non-detectable.