

Report on Drinking Water Quality 2011 Consumer Confidence Report Village of Eagle

The Village of Eagle is pleased to present to you this Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the drinking water as well as other water related services the Village delivers to you every day. This report communicates to the public the source of the Village's water and also summarizes the detected compounds from the sampling results for the year ending 2011. 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.

Source of Water

The Village obtains its drinking water from three drilled groundwater wells. Well No. 1 was constructed in 1952 to a total depth of 880 feet. This well has been permanently abandoned. Well No. 2 was constructed in 1981 to a depth of 1,350 feet and obtains water from the deep sandstone aquifer. The current capacity is 380 gpm. In 2003, the Village drilled two shallow sand and gravel wells (No. 3 and No. 4) meant to supplement the sandstone aquifer sources. These wells are 100 feet and 105 feet in depth and have a combined capacity of around 900 gpm. Well No. 2 pump station has a storage reservoir approximately 100,000 gallons in size. Currently water pumped from Well No. 2 is blended with water from Wells No. 3 and 4 before being pumped to customers. The Eagle water system also has a 150,000 gallon elevated storage tank.

Customer Questions?

If you have any questions about this report or concerning your water utility, please contact the Eagle DPW at (262) 594-3202. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. The Village Board meets at 7:30 P.M. at the Village Hall on the second Thursday of each month.

Water Sample Test Results

The Village has followed the sampling requirements set forth by the Department of Natural Resources. This report summarizes the water sample test results for the period of January 1st 2005 to December 31st 2011. The table which follows summarizes the list of all **detected** compounds. These detects are then compared to a predetermined level of safety known as the Maximum Contaminant Level (MCL). The comparisons show if, for any given compound, there is a system violation.

Special Information Available

It should be noted that all sources of drinking water are subject to potential contamination by compounds that are naturally occurring or are man made. Those compounds can be microbes, organic or inorganic chemicals, or radioactive materials. All 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 the water poses a health risk.

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. The Environmental Protection Agency and the Center for Disease Control (EPA/CDC) guidelines on appropriate means to lessen the risk of infection from potential contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791**.

Table of Detected Compounds

Contaminant Units	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2009)	Violation	Typical Source of Contaminant
HAA5 (ppb)	60	60	2.0	1.0 – 2.0		No	N/A
TTHM (ppb)	80	0	10.7	5.6 – 10.7		No	By-product of drinking water chlorination.
Arsenic (ppb)	10	N/A	1.0	ND – 1.0		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2	2	.850	.041- .850		No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper (ppm)	AL=1.3	1.3	.45	0 of 10 results were above the action level.		No	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives.
Fluoride (ppm)	4	4	.3	ND – .3		No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead (ppb)	AL=15	0	10.0	0 of 10 results were above the action level.		No	Corrosion of household plumbing systems; erosion of natural deposits.
Nickel (ppb)	100		2.3	1.8-2.3		No	Nickel occurs naturally in soils, ground water and surface water and is often used in electroplating, stainless steel and alloy.
Nitrate (NO3-N) (ppm)	10	10	4.79	ND – 6.10		No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	50	50	3.0	ND – 3.0		No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium (ppm)	N/A	N/A	19.0	3.4 – 19.0		No	N/A
Bromochloromethane (ppb)	N/A	N/A	.17	.17		No	N/A
Bromodichloromethane (ppb)	N/A	N/A	2.6	1.6 – 2.6		No	N/A
Bromoform (ppb)	N/A	N/A	2.7	1.10 – 2.7		No	N/A
Chloroform (ppb)	N/A	N/A	1.1	.63 – 1.1		No	N/A
Dibromochloromethane (ppb)	N/A	N/A	4.3	2.3 – 4.3		No	N/A
Toluene (ppb)	1	1	.0002	ND – .0004		No	Discharge from petroleum factories.
Gross Beta Particle Activity (pCi/l)	N/A	N/A	3.4	3.4	3/12/2010	No	Decay of natural and man-made deposits. MCL units are in millirem/year. Calculation for compliance with MCL is not possible unless level found is greater than 50 pCi/l.
Radium (226 + 228) (pCi/l)	5	0	2.4	ND – 2.4		No	Erosion of natural deposits.
Combined Uranium (ppb)	30	0	.4	ND – .4		No	Erosion of natural deposits.

Definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is 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.

Maximum Contaminant Level Goal (MCLG) - The "Goal" is 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.

No Detect (ND) - No trace of compound found.

Not Applicable (N/A) - Does not apply.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

Results

In the year 2011, the Village continued to provide customers with water that is blended with that pumped from two shallow sand and gravel wells and one sandstone well. This blended water supply has a radionuclide (Radium 226/228 and Gross Alpha) concentration below the Maximum Contaminant Level (MCL). Currently, the sandstone well (#2) only pumps a predetermined amount (35,000 gallons) into the attached ground storage reservoir. This water is blended with water from the shallow sand and gravel wells (#3 and #4) and is completely pumped out of the reservoir over a three day period. The Village will continue to collect additional radionuclide samples to verify the blending rates are correct.

Violations

The Village has addressed its previous year's copper exceedance violations by following the recommendations to chemically treat its water by adding both ortho-phosphate and chlorine to the water at the entry points.

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 in the Table represents 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 your water supply operator.

Phosphates create a protective film on the inside of the pipe, slowing the electrochemical processes that leads to corrosion. The addition of chlorine is for disinfection purposes and is required when phosphates are added. These two new chemicals may cause some taste and odor differences from what you may be used to. Please note, these chemicals are being added at small doses to aid in corrosion control and are safe to ingest. If you are bothered by the chlorine taste, keep a pitcher of tap water in the refrigerator. The chlorine will dissipate rapidly if the water is allowed to sit for a time. Phosphates can react with minerals to form compounds that may result in a cloudy, or slightly reddish, appearance to the water. These problems are temporary and will dissipate over time. Flushing water from your tap may help to alleviate taste, odor or discoloration problems.

Previous lead exceedances had triggered the need for the Village to provide the following health effects language. By monitoring the results of the Lead and Copper samples collected after addition of the phosphate and chlorine chemicals, the Village is now required to only collect ten lead and copper samples once per year (as opposed to twenty samples twice per year).

Lead: The United States environmental protection agency (EPA) and the Village of Eagle are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under federal law we are required to have a program in place to minimize lead in your drinking water. This program includes corrosion control treatment, source water treatment, and public education. If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at (262) 594-3202. This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water. Infants and children who drink water containing lead in excess of the Action Level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who over many years drink this water could develop kidney problems, high blood pressure, or may be at an increased risk of getting cancer.

Please feel free to call our office if you have questions concerning this report or any other water supply issues. The Village of Eagle works hard to provide top quality drinking water to all its customers. We ask that all our customers help us protect our water sources by conserving water and participating in the Village efforts to increase awareness of groundwater protection.

Additional Health Information

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.