



# City of Papillion Annual Water Quality Report For the period of January 1 to December 31, 2008

James E. Blinn, Mayor

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If you would like to observe the decision-making processes that affect drinking water quality, please attend the regularly scheduled meeting of the Papillion City Council on the first and third Tuesdays of the month at 7:00 p.m. in the City Council Chambers, located at 122 East Third Street, Papillion, Nebraska. If you would like to participate in the process, please contact the City Clerk at 597-2021 to be placed on the meeting agenda of the Papillion City Council.

### **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.*

**Safe Drinking Water Hotline  
800.426.4791  
[www.epa.gov/safewater.com](http://www.epa.gov/safewater.com)**

In 2008, the City of Papillion was required by EPA to test for unregulated contaminants. None of these contaminants were found in our water system. For a complete list of tested contaminants, please call Richard Heydenreich at (402) 597-2018. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard.

The United States has one of the safest water supplies in the world. However, national statistics don't tell you about safety and quality of the water coming out of your tap. For this reason, the Papillion Water Treatment Plant provides this report annually so you can find out about your own drinking water.

This report includes data collected from **January 1 to December 31, 2008**. It is intended to provide you with important information about your drinking water and the efforts made by the City of Papillion water system to provide safe drinking water.

The sources of drinking water, both tap and bottled, 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.

Papillion's residents receive water from our own groundwater wells located along the Platte River. A total of 11 wells are drilled into the Platte River Alluvial Aquifer. These wells range in depth from 68 to 110 feet. Papillion's wells pumped over a total of 1.2 billion gallons of water in 2008. This included an average daily use of 3.3 million gallons, average monthly use of 100 million gallons, and a maximum daily use of 8.9 million gallons.

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 Water Plant at (402) 597-2018 or the NDEQ at (402) 471-6988.

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 at 1-800-426-4791. Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife. Inorganic contaminants, such as salts and metals, 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 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, 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 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 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.

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 and flush your tap for 30 sec. to 2 min. before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791) or the Dept. of Health and Human Services/Div. of Public Health/Office of Drinking Water at 1-402-471-2541.

***If your home was built before 1990, please take a moment to check if there are plastic couplings on your water meter. Staff from the Papillion Water Plant will change these at no cost to you by appointment. Please call (402) 597-2018 to set up a time. Changing the couplings will prevent them from breaking and potentially flooding your basement. If you are not sure about the couplings, please call the Water Plant at (402) 597-2018, and staff would be happy to check for you.***

The City of Papillion 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, Alachlor, 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, Carbarlyl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methonyl, Metolachlor, Metribuzin, Propachlor

**City of Papillion**

**TEST RESULTS (COLLECTED IN 2008 UNLESS NOTED)**

**Lead and Copper**

**Date Sampled: 7/22/2008**

Lead MCLG	Lead Action Level (AL)	Lead 90 <sup>th</sup> Percentile	No. of Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90 <sup>th</sup> Percentile	No. of Sites Over Copper AL	Likely Source of Contamination
0 ppb	15 ppb	5 ppb	0	1.3 ppm	1.3 ppm	1.1 ppm	1	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems

Regulated Contaminants	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Violation?	Likely Source of Contaminant
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**Disinfectants & Disinfection By-Products**

Chlorite	0.23	0.023 – 0.23	ppm	1	1	No	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5)	48.6	1.3 – 48.6	ppb	n/a	60	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)	72.22	37.34 – 72.22	ppb	n/a	80	No	By-product of drinking water chlorination

**Inorganic Contaminants**

Arsenic	7/9/2007	7.06	n/a	ppb	0	10	No	Erosion of natural deposits; runoff from orchards; runoff from electronics production wastes
Barium		0.179	0.135 -0.179	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium		10.6	6.74 – 10.6	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride		0.42	0.26 – 0.42	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; fertilizer discharge
Nickel	7/10/2006	3.66	1.65 – 3.66	ppb	n/a	100	No	Erosion of natural deposits; leaching
Nitrate-Nitrite		5.2	0.2 – 5.2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**Synthetic Organic Contaminants (including pesticides and herbicides)**

Atrazine		0.272	n/a	ppb	3	3	No	Runoff from herbicide used on row crops
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Unregulated Water Quality Data	Highest Level Detected	Range of Levels Detected	Unit of Measurement
Sulfate 7/10/2006	50	18 - 50	ppm

Notes: 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. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Maximum Contaminant Level (MCL)**

The highest level of a contaminant 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 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.

**n/a**  
Not applicable

**pCi/L**  
Picocuries per liter; a measure of radiation

**ppm**  
Parts per million, or milligrams per liter (mg/L)

**ppb**  
Parts per billion, or micrograms per liter (ug/L)

**HAA5**  
Total Haloacetic Acids

**TTHMs**  
Total Trihalomethanes

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