



City of Papillion (NE3115313) Annual Water Quality Report For the period of January 1 to December 31, 2009

David P. Black, 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.

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
1-800-426-4791
www.epa.gov/safewater.com

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 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, 2009**. 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 1.1 billion gallons of water in 2009. This included an average daily use of 3.2 million gallons, average monthly use of 97 million gallons, and a maximum daily use of 8.9 million gallons.

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, 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.

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 (1-800-426-4791).

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. We 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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

Action Level Goal (ALG) - The level of contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg - Regulatory compliance with some MCLs are based on running annual average of monthly samples

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.

ppm - Parts per million, or milligrams per liter (mg/L), or one ounce in 7,350 gallons of water

ppb - Parts per billion, or micrograms per liter (ug/L), or one ounce in 7,350,000 gallons of water

HAAS - Total Haloacetic Acids

n/a - Not applicable

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

TTHMs - Total Trihalomethanes

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1		0	No	Naturally present in the environment

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper		1.3	1.3	1.1		ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead		0	15	5		ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
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Disinfectants & Disinfection By-Products

Chlorite		0.35	0.19 – 0.35	0.8	1	ppm	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5)*		20	18.6 – 33.1	No goal for the total	60	ppb	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs)*		61.61	44.67 – 61.61	No goal for the total	80	ppb	No	By-product of drinking water chlorination

Inorganic Contaminants

Arsenic ¹	7/9/2007	7.06	0 – 7.06	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from electronics production wastes
Barium	7/28/2008	0.138	0.135 – 0.138	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	7/28/2008	10.6	6.74 – 10.6	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride		1.13	0.685 – 1.13	4	4.0	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate-Nitrite ² (Nitrate measured as Nitrogen)		6.53	0 – 6.53	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Contaminants (including pesticides and herbicides)

Atrazine		0.29	0 – 0.29	3	3	ppb	No	Runoff from herbicide used on row crops
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*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

¹While 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.

²Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six 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.

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.