Washington County Rural Water #1

2010 Water Quality Report

For the period of Jan. 1 to Dec. 31, 2010

PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT
8901 S. 154th St.
Omaha, NE 68138-3621

Dear Water Customer,

Your rural water system places a strong emphasis on sharing information with our customers about the quality of the water service we provide. One way we do this is by reporting to you annually the results of various tests that have been conducted.

The sources of drinking water both tap & bottled, include rivers, lakes, ponds, reservoirs, streams, 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, and can pickup substances resulting from the presence of animals or human activity.

Our water comes from the Metropolitan Utilities District (M.U.D.), which draws water from the Platte and Missouri Rivers. Chloramine is added to your water supply in precise amounts to destroy bacteria, and is a vital step in ensuring the health of our community. Your Washington County Rural Water system presently has about 38 miles of pipeline, providing service to over 485 rural residences and to the City of Ft. Calhoun.

All District employees responsible for operating and maintaining the system are trained and licensed by the State. The District welcomes your comments; the Board of Directors meets at 7:00 p.m., on the second Thursday of every month at 8091 S. 154th Street, Omaha, NE. For a copy of the agenda, call the District at (402) 444-6222 or visit the District's web site at;

www.papionrd.org

About this Report

This report is meant to show substances that were detected in your water during the past calendar year. The U.S. Congress revised the Safe Drinking Water Act in 1996, requiring public water systems to send annual water quality reports to all customers served, or by advertising in a local paper.

Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

What you should know: Contaminants found in your drinking water

In order to ensure that tap water is safe to drink, the Environmental Protection Agency 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.

Drinking water, including bottled water, may reasonably be expected to contain naturally occurring minerals and at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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**.

Contaminants that may be present in the source water include:

A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

B) 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.

C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

D) 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.

E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Source Water Assessment Availability

The Nebraska Dept. 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 NDEQ at 402-471-6988

Notice to immuno-compromised persons

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, those 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 EPA and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800- 426-4791, or visit the web site at; www.epa.gov/safewater

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How to read the report

Maximum Contaminant Level (MCL) 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)** 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** means not applicable. **NTU** means nephelometric turbidity units. **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 - a measure of radiation) **RAA** (running annual average)
< means less than. **>** means more than.

2010 WATER QUALITY REPORT – WASHINGTON COUNTY RURAL WATER #1

Microbiological Contaminants (collected by Wash. Co. RW #1 - 2010)

Type	Highest # of Positive Samples	MCL	MCLG	Likely Source of Contamination	Violations Present
Coliform	No Detected Results were Found in the Calendar Year 2010				

Lead & Copper (collected by Wash. Co. RW #1 – Monitoring Period 2008 -2010)

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	Sites Over Lead AL	Violation	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	Sites Over Copper Al	Violation	Likely Source of Contamination
O PPB	15 PPB	2.1 PPB	0	NO	1.3 PPM	1.3 PPM	.0165 PPM	0	NO	Erosion of natural deposits; corrosion of household plumbing

Copper is an essential nutrient, but some people who drink water containing copper in excess of the Action Level (AL) over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the Action Level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their doctor.

Infants and young children are typically more vulnerable to lead in drinking water. 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 ½ to 2 minutes before using the 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 Dept. of Health & Human Services/Division of Public Health/Office of Drinking Water (402-471-2541).

Regulated Contaminants (collected by M.U. D. - 2010)

Contaminant	Violation	Highest Level Detected	Range of Levels Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Arsenic	NO	5	<2 -5	PPB	0	10	Runoff from orchards; natural deposits; runoff from glass & electronic production wastes
Atrazine	NO	.92	<0.08 – 0.92	PPB	3	3	Runoff from herbicides used on row crops
Barium	NO	.10	.05 - .10	PPM	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	NO	7.11	2.18 – 7.11	PPB	100	100	Discharge from steel & pulp mills; erosion of natural deposits
Fluoride	NO	1.09	.77 – 1.09	PPM	4	4	Erosion of natural deposits; water additive to promote strong teeth; fertilizer discharge
Selenium	NO	7.88	<5.0 – 7.88	PPB	50	50	Discharge from petroleum & metal refineries; erosion of natural deposits
Nitrate & Nitrite Total	NO	2.3	.34 – 2.3	PPM	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	NO	78	35 - 78	PPM	N/A	500	Element of the alkali metal group found in nature, soil and rocks
Turbidity	NO	.38	N/A	NTU	N/A	1	Soil runoff
Heptachlor Expoxide	NO	90	<.04 - 90	PPT	0	200	Breakdown of Heptachlor
Di(2-Ethyhexyl) Phthalate	NO	170	<2.0 - 170	PPB	0	6	Discharge from rubber and chemical factories

Some people who drink water containing di(2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver or experience reproductive difficulties, and may have an increased risk of getting cancer. An extensive investigation indicated a sampling error may have caused a high detection.

Radioactive Contaminants (collected by M.U.D. - 2010)

Gross Alpha, excludes Radon & Uranium	NO	6.0	<1.8 – 6.0	pCi/l	0	15	Erosion of natural deposits
Radium (Ra 226 + Ra 228)	NO	2.5	<0.8 – 2.5	pCi/l	0	5	Erosion of natural deposits

Disinfection By-Products (collected by Wash. County RW #1)

Contaminant	Violation	Highest RAA	Range	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Total Haloacetic Acids (HAA5) (4/1/2009 – 3/31/10)	NO	35.4	18 – 47.5	PPB	No Goal for the Total	60	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (4/1/09 – 3/31/10)	NO	59.05	37.86 – 77.53	PPB	No Goal for the Total	80	By-product of drinking water chlorination

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Unregulated Water Quality Data (collected by M.U.D.- 2010)

Tested & Detected	Unit	Highest Level Detected	Range of Levels
Nickel	ppb	.00269	.00193 - .00269
Sulfate	ppm	213	75 - 213
Total Organic Carbon	ppm	5.4	2.70 – 5.40
Metolachlor	ppb	.4	.1 - .4
Magnesium	ppm	25	7 – 25

Mineral Analysis (collected by M.U.D. - 2010)

	Unit	Highest Level Detected	Range of Levels
pH	(in pH units)	9.10	8.57 – 9.10
Alkalinity (total as CaCO3)	ppm	148	50 - 148
Aluminum	ppm	.15	<.02 - .15
Calcium	ppm	56	38 - 56
Chloride	ppm	43	17 - 43
Color (in cobalt platinum units)	ppm	5	1 - 5
Dissolved Solids (total, calculated	ppm	494	366 - 494
Hardness (total) as CaCO3	grains per gallon	10	9 - 13
Iron	ppm	.14	<.02 - .14
Manganese	ppm	<0.02	<0.02 - .02
Phosphate	ppm	.33	<.05 - .33
Silica	ppm	31.3	4.7 -31.3
Spec. Conductance @ 25 Deg.C	umhos	700	455 - 700
Temperature degrees	Celsius	26.6	1.1 – 26.6
Zinc	ppm	<0.02	<.002

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.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

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.

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

Type	Category	Analyte	Compliance Period
No Violations Occurred in Calendar Year 2010			

Quality On Tap!

Our Commitment Our Profession