

2009 Annual Drinking Water Quality Report

East Valley Water System

Is my water safe?

Last year, we conducted tests for over 80 contaminants. We only detected 12 of those contaminants, and found only 1 at a level higher than the EPA allows. As we told you at the time, our water temporarily exceeded drinking water standards. (For more information see the section labeled Violations at the end of the report.) This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Our water source is ground water taken from three active wells in the East Valley Water Service Area, the Airport Well located on Airport Rd., the South Airport Well located south end of the airport, and the North Clapham Well located on Clapham Rd. In addition, this system has two booster stations and three storage tanks. Treatment is not required, however disinfection with chlorine (sodium hypochlorite) is accomplished at the South Airport Well and North Clapham Well and booster sites for the upper zones.

Beginning March 30, 2009 your water now comes from the Town of Minden, see below for the Town of Minden Water Quality Table. For additional information on the Town of Minden water, please contact the Town of Minden at (775) 782-5976 or go to the Town of Minden website at <http://www.townofminden.com>.

Source water assessment and its availability

The East Valley Water System presently complies with all State and Federal Maximum Contaminants Levels. The three active wells may not comply with the revised Arsenic Maximum Contaminant Level of 10 Parts per Billion. The revised arsenic Maximum Contaminant Level regulation became effective in January 2006 with a compliance date of January 2008. One well is considered to have moderate vulnerability to Volatile Organic Compounds (VOC).

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's

(EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) 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, and can pick up substances resulting from the presence of animals or from human activity:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; I
- norganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater 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 stormwater 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 stormwater runoff, and septic systems;
- Radioactive contaminants, which 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

To get involved, see our newly adopted Water Conservation Plan at <http://cltr.co.douglas.nv.us/Utilities/Waterplan.pdf>

Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up

- to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
 - Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
 - Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Variance and Exemptions

East Valley Water System has Arsenic levels in exceedence of the new standard of 10 ppb set down by the EPA in January 2006. The East Valley Water System has been granted an exemption and extension in our efforts to meet the revised lower limits for Arsenic, in effect until January 23, 2011. On March 30, 2009 we tied in with the Town of Minden as a new source of water for the System. This new connection should supply water with levels of Arsenic low enough to meet the new state and federal requirements.

Additional Information for Lead

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. East Valley 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>.

Test Results for Douglas County East Valley Water System

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
Inorganic Contaminants								
Arsenic (ppb)	0	10	35	22	35	2009	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	4	4	2.5	NA		2009	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	4.9	ND	4.9	2009	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium (ppm)	2	2	0.01	ND	0.01	2006	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	0.003	NA		2009	No	Discharge from steel and pulp mills; Erosion of natural deposits
Sodium (optional) (ppm)		200	69	30	69	2008	No	Erosion of natural deposits; Leaching
Radioactive Contaminants								
Beta/photon emitters (pCi/L)	0	50	0.07	ND	0.07	2009	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Alpha emitters (pCi/L)	0	15	1.77	ND	1.77	2009	No	Erosion of natural deposits
Uranium (ug/L)	0	30	6	ND	6	2007	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	0.938	0	0.938	2005	No	Erosion of natural deposits
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>	
Inorganic Contaminants								

Copper - action level at consumer taps (ppm)	1.3	1.3	0.02	2009	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	1	2008	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Violations and Exceedances
<p>Arsenic</p> <p>Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. The table shows that our system uncovered some problems this year. East Valley Water System has Arsenic levels in exceedence of the new standard of 10 ppb set down by the EPA in January 2006. The potential adverse health effects are some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. On March 30, 2009 Douglas County Public Works turned off our active wells and is now obtaining water that complies with the Arsenic standard from the Town of Minden. This new connection should supply water with levels of Arsenic low enough to meet the new state and federal requirements</p>

Test Results for Town of Minden Water System

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
Inorganic Contaminants								
Arsenic (ppb)	0	10	10	4	10	2009	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.12	0.05	0.12	2009	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	2	ND	2	2009	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	0.2	0.1	0.2	2009	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.8	0.5	0.8	2009	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Selenium (ppb)	50	50	2	2	2	2009	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (optional) (ppm)		200	20	15	20	2009	No	Erosion of natural deposits; Leaching
Microbiological Contaminants								
Total Coliform (positive samples/month)	0	1	1	NA		2009	No	Naturally present in the environment
Turbidity (NTU)	NA	5	0.5	NA		2009	No	Soil runoff
Radioactive Contaminants								
Uranium (ug/L)	0	30	3	ND	3	2008	No	Erosion of natural deposits
Alpha emitters (pCi/L)	0	15	0.003	ND	0.003	2008	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	4.9	ND	4.9	2009	No	Erosion of natural deposits
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>	
Inorganic Contaminants								
Copper (ppm)	1.3	1.3	0.06	2005 - 2007	0		No	Corrosion of household plumbing systems; Erosion of natural deposits

<u>Disinfection By-Product</u>	<u>Monitoring Period</u>	<u>RAA</u>	<u>Range</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Typical Source</u>
No Detected Results were Found in the Calendar Year of 2009							

<u>Radionuclides</u>	<u>MCL</u>	<u>MCLG</u>	<u>Your Water</u>	<u>Range</u>	<u>Units</u>	<u>Date</u>	<u>Typical Source</u>
Combined Uranium	30	0	3	3	ug/L	2008	Erosion of natural deposits;
Gross Alpha, Excl. Radon & U	2	2	0.12	0.12	pCi/L	2008	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Gross Alpha, Incl. Radon & U	15	0	4.9	4.9	pCi/L	2009	Discharge from steel and pulp mills; Erosion of natural deposits

<u>Secondary Contaminants</u>	<u>Date</u>	<u>Highest Value</u>	<u>Range</u>	<u>Unit</u>	<u>MCL</u>	<u>MCLG</u>	<u>Typical Source</u>
Alkalinity, Bicarbonate	2009	184	121 – 184	mg/L			
Alkalinity, Total	2009	151	99 – 151	mg/L			
Boron Total	2009	0.2	0.1 – 0.2	mg/L			
Calcium	2009	42	26 – 42	mg/L			
Chloride	2009	8	6 – 8	mg/L	400		

Conductivity @ 25C	2009	350	240 – 350	uMHO/CM			
Hardness, Calcium Magnesium	2009	98	98	mg/L			
Hardness Total (as CAC03)	2009	146	94 – 146	mg/L			
Iron	2009	0.05	0.05	mg/L	0.6		
Magnesium	2009	10	5 – 10	mg/L	150		
Manganese	2009	0.02	0.02	mg/L	0.1		
Nickel	2009	0.002	0.002	mg/L	0.1	0.1	
pH	2009	8.27	8.05 – 8.27	pH	8.5		
Silica	2009	39	32 – 39	mg/L			
Sulfate	2009	22	16 – 22	mg/L	500		
TDS	2009	220	171 – 220	mg/L	1000		

Health Information About Town of Minden Water Quality

Additional Required Health Effects Language:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

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.

For more information please contact:

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