

2008 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.

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; inorganic 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; and 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, please 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 350 gallons of water per day? Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving; 3-5 gallons go down the drain per minute. 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!

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.

Monitoring and reporting of compliance data violations

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. This past year we failed to monitor for Arsenic for the first and second quarter of 2008. This does not pose a threat to the quality of our water supply.

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>.

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 Low High</u> | <u>Sample Date</u> | <u>Violation</u> | <u>Typical Source</u> |
|--|------------------------------|---------------------------------|-----------------------|---------------------------|------------------------|------------------|--|
| Disinfectants & Disinfection By-Products | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.) | | | | | | | |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 4.3 | ND 4.3 | 2008 | No | By-product of drinking water disinfection |
| Inorganic Contaminants | | | | | | | |
| Arsenic (ppb) | 0 | 10 | 35 | 22 35 | 2008 | Yes | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |

| | | | | | | | | |
|--------------------------------------|-----|-----|-------|----|-------|------|----|---|
| 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 | 0.002 | ND | 0.002 | 2006 | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| Fluoride (ppm) | 4 | 4 | 1.4 | ND | 1.4 | 2008 | 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 | 2008 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

Radioactive Contaminants

| | | | | | | | | |
|-----------------------------------|---|----|-------|----|-------|------|----|---|
| Alpha emitters (pCi/L) | 0 | 15 | 1.77 | ND | 1.77 | 2008 | No | Erosion of natural deposits |
| Beta/photon emitters (pCi/L) | 0 | 50 | 0.07 | ND | 0.07 | 2008 | No | Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles. |
| Radium (combined 226/228) (pCi/L) | 0 | 5 | 0.938 | 0 | 0.938 | 2005 | No | Erosion of natural deposits |
| Uranium (ug/L) | 0 | 30 | 6 | ND | 6 | 2007 | 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 | 2008 | 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 |

Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

| <u>Name</u> | <u>Reported Level</u> | <u>Range</u> | |
|----------------------------|-----------------------|--------------|-------------|
| | | <u>Low</u> | <u>High</u> |
| Bromodichloromethane (ppb) | 0.92 | NA | 0.92 |
| Bromoform (ppb) | 1.6 | NA | 1.6 |

| <u>Unit Descriptions</u> | |
|--------------------------|--|
| <u>Term</u> | <u>Definition</u> |
| ug/L | ug/L : Number of micrograms of substance in one liter of water |
| ppm | ppm: parts per million, or milligrams per liter (mg/L) |
| ppb | ppb: parts per billion, or micrograms per liter (µg/L) |
| pCi/L | pCi/L: picocuries per liter (a measure of radioactivity) |
| NA | NA: not applicable |
| ND | ND: Not detected |
| NR | NR: Monitoring not required, but recommended. |

| Important Drinking Water Definitions | |
|---|---|
| Term | Definition |
| MCLG | MCLG: Maximum Contaminant Level Goal: 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. |
| MCL | MCL: Maximum Contaminant Level: 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. |
| TT | TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. |
| AL | AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. |
| Variances and Exemptions | Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions. |
| MRDLG | MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. |
| MRDL | MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. |
| MNR | MNR: Monitored Not Regulated |
| MPL | MPL: State Assigned Maximum Permissible Level |

Violations and Exceedances

Arsenic

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. Your 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. 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

For more information please contact:

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