

# City of Newdale Water Quality Report 2012

## **Spanish (Español)**

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

## **Is my water safe?**

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards with the exception of excess levels of arsenic and fluoride in the Highway 33 backup well – which is rarely used. The City of Newdale vigilantly safeguards its water supplies and we are proud to report that the new water supply well for our system provides excellent quality water that meets all water quality standards.

## **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?**

Drinking water in Newdale comes from a groundwater well drilled 800 ft into the lava rock. A 330 ft well west of the City serves as a backup supply if ever needed.

## **Source water assessment and its availability**

Source Water Assessments for the City's water supply wells have been conducted which identifies the groundwater supply flows into the wells from areas east of the City. City planners and elected officials carefully monitor proposed development and other activities in that area to help protect the water supply from contamination. Copies of the assessments are available for review at City Hall.

## **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).

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 such as the following:

- 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 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; 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?**

The City Council is ultimately responsible for regulating and protecting the water supply, storage, pumping, and distribution facilities. They meet the second Thursday of every month and welcome citizen input on protection and improvement of the water system. You can also access EPA's drinking water web site at <http://www.epa.gov/safewater/> to learn more about water quality.

### **Lead Informational Statement (Health effects and ways to reduce exposure)**

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. The City 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 drinking 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>.

### **Highway 33 Backup Well and Arsenic and Fluoride Information**

The Highway 33 Well used to be the primary water supply but now serves as the backup well for the system and is rarely used (about 3 weeks last year while the main well was being worked on). Water from the Highway 33 Well exceeds the EPA recommended maximum contaminate limits (MCL) for arsenic and fluoride. We have and will continue to notify you whenever this well being used.

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.

Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children’s teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

### Total Coliform Bacteria

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 one monthly sample and this was a warning of potential problems. Subsequent disinfection of the system cleared the problem.

## Water Quality Data Table

We test our drinking water for over 80 potential contaminants. The table below lists only those that have been detected in our system. 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 allows 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>Our Water</u> | <u>Range</u> |             | <u>Sample Date</u> | <u>Violation</u> | <u>Typical Source</u>  |
|-------------------------------------|----------------------|-------------------------|------------------|--------------|-------------|--------------------|------------------|--|
|                                     |                      |                         |                  | <u>Low</u>   | <u>High</u> |                    |                  |  |
| <b>Inorganic Contaminants</b>       |                      |                         |                  |              |             |                    |                  |  |
| Arsenic (ppb)<br>Hill Well          | 0                    | 10                      | 2.32             | N/A          |             | 2011               | No               | Erosion of natural deposits;<br>Runoff from orchards;<br>Runoff from glass and electronics production wastes   |
| Arsenic (ppb)<br>Hwy 33 Backup Well | 0                    | 10                      | 11               | N/A          |             | 2012               | Yes              | <u>Health Effects:</u> 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. |
| Fluoride (ppm)<br>Hill Well         | 4                    | 4                       | 0.8              | 0.7          | 0.8         | 2012               | No               | Erosion of natural deposits;<br>Water additive which promotes strong teeth;<br>Discharge from fertilizer and aluminum factories  |

|   |    |    |      |      |      |      |     |  |
|---|----|----|------|------|------|------|-----|--|
| Fluoride (ppm)<br>Hwy 33 Backup Well    | 4  | 4  | 4.8  | N/A  |      | 2012 | Yes | <u>Health Effects:</u> Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums. |
| Nitrate [measured as Nitrogen] (ppm)    | 10 | 10 | 1.78 | 1.31 | 2.24 | 2012 | No  | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits  |
| <b>Microbiological Contaminants</b>     |    |    |      |      |      |      |     |  |
| Total Coliform (positive samples/month) | 0  | 1  | 1    | 0    | 1    | 2012 | Yes | <u>Health Effects:</u> 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.   |
| <b>Radioactive Contaminants</b>         |    |    |      |      |      |      |     |  |
| Alpha emitters (pCi/L)                  | 0  | 15 | 3.2  | 2.7  | 3.6  | 2012 | No  | Erosion of natural deposits  |
| Beta/photon emitters (pCi/L)            | 0  | 50 | 3.4  | NA   |      | 2011 | 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  | 0.64 | 0.15 | 0.97 | 2012 | No  | Erosion of natural deposits  |
| Uranium (ug/L)                          | 0  | 30 | 1.4  | 1.3  | 1.5  | 2012 | No  | Erosion of natural deposits  |

| <u>Contaminants</u>                          | <u>MCLG</u> | <u>AL</u> | <u>Our Water</u> | <u>Sam Date</u> | <u># Samples Exceeding AL</u> | <u>Exceeds AL</u> | <u>Typical Source</u>  |
|--|-------------|-----------|------------------|-----------------|-------------------------------|-------------------|--|
| <b>Inorganic Contaminants</b>                |             |           |                  |                 |                               |                   |  |
| Copper - action level at consumer taps (ppm) | 1.3         | 1.3       | 0.109            | 2010            | 0                             | No                | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead - action level at consumer taps (ppb)   | 0           | 15        | 16               | 2010            | 0                             | No                | Corrosion of household plumbing systems; Erosion of natural deposits |

### Unit Descriptions

| <u>Term</u> | <u>Definition</u>                                      |
|-------------|--|
| ppm         | ppm: parts per million, or milligrams per liter (mg/L) |
| ppb         | ppb: parts per billion, or micrograms per liter (µg/L) |
| NA          | NA: not applicable                                     |
| ND          | ND: Not detected                                       |
| NR          | NR: Monitoring not required, but recommended.          |

### Important Drinking Water Definitions

| <u>Term</u>              | <u>Definition</u>   |
|--------------------------|---|
| 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   |

### For more information please contact:

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