

**CITY OF SELDOVIA
PUBLIC WATER SYSTEM # 240707**

2008 CONSUMER CONFIDENCE REPORT

The City of Seldovia is pleased to present to you this year's Annual **Consumer Confidence Report**, which covers the January-December 2008 period. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. As most of you are aware, the City of Seldovia has been actively working on city water and sewer upgrades for a number of years and are nearing construction of replacing the older pipes in Phase I. We continue to strive to optimize our current treatment system, and to maintain and repair leaks in the water distribution system as needed.

Our water source is surface water from the upper water reservoir located in the hills east of the airport. For those of you that don't know where the reservoir is located, a copy of the topographical map is available for review at the City office.

During 2008, the City of Seldovia operated under the Filtration Avoidance program. This program, allowed by State and Federal regulations allows a water system using a surface water source to treat the raw water without filtration if the system can meet very strict standards governing the raw and treated water quality, system design and watershed control. Because of the new Long Term 2 Rule, the City will be required to perform more testing. We have acquired water testing lab equipment and currently have Provisional Certification. This will help us meet required testing with immediate results. Minor modifications will be made to the water treatment plant. Alarms, and a secondary disinfection system, along with daily testing results will help monitor the water quality and to improve our ability to respond quickly to poor water quality. Also, to further address this problem, the City of Seldovia intends to install filtration at the water treatment plant within the next couple of years. Filtration will enhance the water quality by removing more of the organic matter from the water prior to it being disinfected, and will provide a double-barrier system which will increase the removal and inactivation of micro-organisms that may exist in the raw untreated water source.

Water treatment

Currently, treatment takes place at the chlorination building where chlorine is added to treat the raw water for water born pathogens. The water is then placed in a 550,000 gallon storage tank. The water moves from the storage tank to the distribution lines serving the city. The treated water is tested daily for turbidity (clarity), chlorine levels, temperature and pH. In addition, a weekly sample from the raw water is tested for fecal coliform bacteria. We also sample five sites around town to test for chlorine residual and to ensure that the treated water is free of bacteria and to verify that we have an adequate chlorine residual in the distribution system.

There is approximately 15,840 feet of water pipe within Seldovia's distribution system. The water distribution system starts at the upper reservoir and is piped to the chlorinating building. Chlorine is added as the water moves to the tank, then to the distribution lines to the city. The water system is controlled by over 55 valves, and there are 49 fire hydrants.

The water system for Seldovia is controlled by the City of Seldovia. At present we have three certified water operators, Mary Klinger, Manfred Kirchner, and Matthew Gallien, Provisional 1 Treatment and Distribution. If you have any questions about this report or your water utility, please contact the City Manager at the City of Seldovia at 234-7643. We want our customers to be informed about their water utility. You may also come to the City of Seldovia Council meetings scheduled for the second and fourth Wednesdays of each month. The meetings are held in the Multipurpose Room.

General Information about Water Tests and Contaminants

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/or it can pick up substances resulting from the presence of animals or from human activity. Therefore, one can reasonably expect their drinking water, including bottled water, to contain at least small amounts of some contaminants. It is important to remember that the presence of contaminants does not necessarily indicate that water poses a public health risk, and the risk is dependent on such things as the level of contamination and the length of exposure. 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Some people may be more vulnerable to contaminants in drinking water than the general population.

Contaminants that may be present in source water include: Microbial contaminants, such as viruses and bacteria, which may come from septic systems, agricultural livestock operations, and wildlife; Inorganic contaminants, such as salts and metal, which can be naturally occurring; Pesticides and herbicides, which may come from a variety of sources such as agriculture, and residential uses; Organic chemical contaminants, including synthetic and volatile chemicals, which are byproducts of industrial processes and septic systems; and/or, Radioactive contaminants, which can be naturally occurring or by the result of oil and gas mining activities.

MCL's are set by the Environmental Protection Agency at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-

million chance of having the described health effect. Consumers may obtain additional information about individual contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800-426-4791).

Water Quality Test Results

Our water operators routinely monitor for contaminants in your drinking water according to Federal and State laws. The State requires us to monitor for many contaminants on different schedules. The monitoring requirements vary depending on the water source and contaminant. The following table shows the results of our monitoring for the 2008 year or for the last sample collected. We received a waiver from the Department of Environmental Conservation so we were not required to test for Pesticides and Herbicides.

Table of Detected Contaminants in 2008

In the table below you will find terms and abbreviations you might not be familiar with. To better help you understand these terms, please review the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level - the concentration of a contaminant which, if exceeded, baggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of contaminants in drinking water.

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - The "Goal"(MCLG) is 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.

Turbidity - Suspended material or cloudiness, measured in NTU'S. Turbidity has no health effects. However, turbidity can interfere with disinfecting and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

NTU's - Nephelometric Turbidity Unit, units of turbidity indicated by an instrument (nephelometer) that measures refracted light through a water sample.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

2008 SUMMARY

Contaminant	Level Detected	MCLG	MCL or AL*	Likely Source of Contamination
1. Turbidity (Treated Water)	Highest 2.88 NTU (+/-)	N/A	1.49 NTU	Soil Runoff
2. Arsenic	0 ppb	N/A	10ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
3. Lead	11 ppb	0 ppb	AL = 15ppb	Corrosion of Household Plumbing
4. Copper	2.23 ppm* violation	1.3 ppm	AL = 1.3ppm	Corrosion of Household Plumbing
5. Nitrate	1.19 ppm	10 ppm	10 ppm	Erosion of Natural Deposits
6. Total Trihalomethanes	37.2 ppb	N/A	80 ppb	Chlorination by-product
7. Haloacetic Acid	57.0 ppb	N/A	60 ppb	Chlorination by-product
8. Beta/ photon emitters	2.1 Pic/L	0	50	Decay of natural and man-made deposits
9. Combined radium	1.04 Pic/L	0	5	Decay of natural and man-made deposits

- Compliance with the Lead and Copper Rule is based on 90 percent of the results being less than or equal to the action level (AL). In 2006 five houses were sampled, and 3 houses failed the AL for copper, so we exceeded the action for this contaminant.
- Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level 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 personal doctor.
- Elevated Lead and Copper Levels: Our lead and copper tests, completed in 2007, indicate that some of the homes tested have elevated levels of copper. Lead and copper are generally found in the water because it leaches from the water plumbing, solder and fixtures. We will complete a corrosion control study to determine if we can treat the water in a way to make it less corrosive, which ultimately would reduce the lead and copper "at-the-tap". This corrosion control study is being completed along with an entire system design review. When it is determined what type of treatment we will install, further notice will be provided
- Health Affects of Lead and Copper: Infants and young children are typically more vulnerable to lead and copper in drinking water than the general population. Prolonged exposure to high levels of lead can cause delay in child development. Also, studies have shown that prolonged exposure to elevated lead or copper over many years may increase the risk of kidney, liver and/or high blood pressure problems. The level of exposure is based on all avenues of exposure from air, food, water, etc. However, EPA sets the action levels for these contaminants for water systems so that appropriate treatment can be installed to reduce the risk. It is possible that lead or copper 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 or copper levels in your home's water, you may wish to have your water tested. Also, to reduce the level of lead and/or copper at the tap, use your cold water tap for cooking and drinking water. Always flush the tap for 30 seconds to 2 minutes before using the water for drinking and/or cooking purposes. Additional educational materials on lead and copper are available upon request at City office.
- TTHMs [Total Trihalomethanes]. 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.

Violations: We received a treatment technique violation in June of 2008 for not maintaining a .2 mg/l chlorine residual. As indicated in prior public notice, we had a violation on one occasion when the chlorine levels were too low due to a huge water line leak. Treatment Technique Violations are considered treatment technique (TT) violations. TT violations indicated that the water may not be adequately treated to remove or destroy micro-organisms.

We thank you for allowing us to provide you with a safe dependable water source.