



# City of Los Banos 2007 Drinking Water Consumer Confidence Report

**This report contains important information on your drinking water.**

**Este informe contiene informacion muy importante sobre su agua potable.  
Traduzcalo o hable con alguien que lo entiende bien.**

The information gathered here is compiled from the testing of all drinking water sources, which the City of Los Banos uses to provide potable drinking water to your homes and businesses. During the 2007 Calendar Year, your tap water met all regulated Environmental Protection Agency and State of California testing requirements for drinking water.

This report includes information regarding where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies. Listed in the tables of this report are only the contaminants found in your drinking water. If you would like additional water quality information, or have any questions regarding the information covered in this report, or you would like information in Spanish you may contact Gary Hutsell, Assistant Public Works Director at (209) 827-7056.

**As a resident, you may participate in decisions that affect drinking water quality.** City Council meetings are scheduled at 7:00 P.M. on the first and third Wednesdays of each month. City Council meetings are open to the public, and are televised on Cable Channel 96. For more information, call (209) 827-7056.

## **WHERE YOUR DRINKING WATER COMES FROM**

The City of Los Banos owns and operates thirteen approved groundwater production wells that work in conjunction with each other to provide adequate pressure and volume to your location. These groundwater extraction wells draw water at various depths from water producing zones called "Aquifers." Clay layers separate each of the zones. These wells are located in and around the City Limits at various locations. The City owns the land immediately around these wells and restricts any activity that could contaminate them.

A source water assessment was conducted for the active water supply wells of the City of Los Banos Water System in December 2001. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply:

<i>Agricultural Drainage</i>	<i>Fleet /Truck/Bus Terminals</i>	<i>Rental Yards</i>
<i>Apartments and Condominiums</i>	<i>Food Processing</i>	<i>RV/Mini Storage</i>
<i>Automobile Body Shops</i>	<i>Hardware/Lumber/Parts Stores</i>	<i>Schools</i>
<i>Automobile Car Washes</i>	<i>Housing (high density)</i>	<i>Septic Systems (low density)</i>
<i>Automobile Gas Stations</i>	<i>Machine Shops</i>	<i>Septic Systems (high density)</i>
<i>Automobile Repair Shops</i>	<i>Medical/Dental Offices/Clinics</i>	<i>Sewer Collection Systems</i>
<i>Chemical/Petroleum Pipelines</i>	<i>Offices Buildings/ Complexes</i>	<i>Veterinary Offices/Clinics</i>
<i>Drinking Water Treatment Plants</i>	<i>Parks</i>	<i>Wood/Pulp/Paper Processing</i>
<i>Dry Cleaners</i>	<i>Photo Processing/Printing</i>	<i>and Mills</i>
<i>Fertilizer,Pesticide/Herbicide Application</i>	<i>Pesticide/Fertilizer/Petroleum Storage and Transfer Areas</i>	

The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

*Airports (maintenance/fueling areas)  
Concentrated Animal Feeding Operations  
Historic Gas Stations*

*Historic Waste Dumps/Landfills  
Known Contaminant Plumes  
Wells (agricultural/irrigation)*

A copy of the complete assessment may be viewed at the City of Los Banos Department of Public Works at 411 Madison Avenue. You may request that a summary of the assessment be sent to you by contacting the Public Works Department at (209) 827-7056.

## **IS YOUR WATER TREATED WITH ANY CHEMICALS?**

The answer is yes. Chlorine (Sodium Hypochlorite) and Fluoride (Sodium Fluoride) are introduced to the system as the water is pumped from the wells. Chlorine is used to disinfect drinking water. Fluoride is added for dental health. Both chemicals are constantly monitored to ensure concentrations are kept at regulated levels.

## **IMPORTANT HEALTH INFORMATION**

**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 USEPA's Safe Drinking Water Hotline 1-800- 426-4791.

**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. U.S. Environmental Protection Agency/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 Drinking Water Hotline 1-800- 426-4791, or visit EPA's website (<http://www.epa.gov/safewater/hfacts.html>)

**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. Contaminants that may be present in 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 and farming.
- C.) **Pesticides and Herbicides**, that may come from a variety of sources such as agriculture and residential uses.
- D.) **Radioactive contaminants**, that are naturally occurring, or the result of oil and gas production and mining activities.

- E.) **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, agricultural application, and septic systems.

**In order to ensure that tap water is safe to drink, U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.** Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

The following tables are based on testing taken during the 2007 Calendar year. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. Some contaminants are tested more than once a year and each month a test was taken will be indicated in the tables.

**TERMS AND ABBREVIATIONS USED IN THE TABLES:**

**MAXIMUM CONTAMINANT LEVEL (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**MAXIMUM CONTAMINANT LEVEL GOAL (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL):** The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG):** The level of a disinfectant added for water treatment below, for which there is no known or expected risk to health. MRDLGs are set by the USEPA.

**PUBLIC HEALTH GOAL (PHG):** The level of a contaminant in drinking water below, for which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**PRIMARY DRINKING WATER STANDARD (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**REGULATORY ACTION LEVEL (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

**PARTS PER MILLION (PPM):** or milligrams per liter. It means one part per million parts.

**PARTS PER BILLION (PPB):** or micrograms per liter. It means one part per billion parts.

**PICO CURIES PER LITER (pCi / L):** A measure of radioactivity.

**NONE DETECTED (N/D):** Contaminant not detected.

**NOT APPLICABLE (N/A):** Does not apply.

**PRIMARY INORGANIC CONTAMINANTS**

Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Detected Level	Range of Detection	Source of Contaminants
ALUMINUM	July '05	PPB	1000	600	6	N/D - 80	Erosion of natural deposits
ARSENIC	July '05 Feb. '06 May '06 Aug. '06	PPB	10	4	8	6 - 12*	Erosion of natural deposits; runoff from orchards.
<b>*The well with 12 PPB was removed from service and placed on standby status in 2006.</b>							

## PRIMARY INORGANIC CONTAMINANTS, continued

Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Detected Level	Range of Detection	Source of Contaminants
BARIUM	July '05	PPB	1000	(2000)	28	N/D - 150	Erosion of natural deposits.
CHROMIUM	July '05	PPB	50	(100)	24	20 - 30	Erosion of natural deposits. Discharge from steel and pulp mills and chrome plating.
NITRATE As nitrate	Jan. '07 April '07 Aug. '07 Nov. '07	PPM	45	45	21	9 - 41	Leaching from livestock confinement areas, leaching from fertilizer use, leaching from septic tanks. Erosion of natural deposits.
FLUORIDE ** (naturally occurring)	April '07	PPB	2000	1000	170	130 – 400	Erosion of natural deposits.

\*\* Our water system treats your drinking water by adding fluoride to the naturally occurring fluoride in order to promote dental health in consumers. The fluoride levels in the treated water are maintained within a range of 600 to 900 ppb as required by California Department of Health Services regulations.

## HEALTH STATEMENT ON ARSENIC

While your drinking water meets the current EPA standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

## HEALTH STATEMENT ON NITRATE

Your drinking water meets the state standard for Nitrate, however it does contain low levels of Nitrate. Nitrate in drinking water at levels above 45 parts per million is a health risk for infants of less than six months of age. Such Nitrate levels in drinking water can interfere with the capacity of the infants' blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of skin. Nitrate levels above 45 parts per million may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

## LEAD AND COPPER HOUSEHOLD TAP MONITORING

The Department of Health Services requires our water system to test for lead and copper at household tap sources. The required testing is performed every three years at a representative amount of houses based on service connections and possible at risk household plumbing. The AL is based on the 90th percentile of the number of sites tested.

The Regulatory Action Level is a concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Contaminant	Date Tested	Unit of Measurement	Action Level	Public Health Goal	Detected Level	Range of Detection	Source of Contaminants
LEAD	Aug. '05	PPB	15	2	90 <sup>th</sup> Percentile detected level is 2.5	Number of sites tested above the AL is 1 of 33	Internal corrosion of household plumbing systems.
COPPER	Aug. '05	PPB	1300	170	90 <sup>th</sup> Percentile level is 340	Number of sites tested above AL is 0 of 33	Internal corrosion of household plumbing systems.

## VOLATILE ORGANIC CONTAMINANTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Detected Level	Range of Detection	Source of Contaminants
TETRACHLOROETHYLENE (PCE)	Jan. '07	PPB	5	0.06	0.87	N/D-0.87	Discharge from factories, dry cleaners, and auto shops. (metal degreaser)

## RADIOACTIVE CONTAMINANTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	PHG (MCLG)	Detected Level	Range of Detection	Source of Contaminants
Gross Alpha Particle Activity	Jan '05 May '05 Aug.'05 Oct.'05 Nov.'05	pCi / L	15	(0)	5	N/D - 15	Erosion of natural deposits.
URANIUM	Jan.'05 May '05 Aug.'05 Nov.'05	pCi / L	20	0.43	4	N/D - 12	Erosion of natural deposits.
RADIUM 226	May '06	pCi / L	5	(0)	0.09	N/D – 0.19	Erosion of natural deposits.

## COLIFORM BACTERIA

There were no positive Coliform Bacteria results out of 550 tests taken in the 2007 calendar year.

## DISINFECTION BY- PRODUCTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL or MRDL	PHG (MCLG) Or MRDLG	Detected Level	Range of Detection	Source of Contaminants
HAA5 (Haloacetic Acids)	Aug. '07	PPB	60	N/A	2.9	2.9	By-product of drinking water chlorination.
TTHMS (Total Trihalomethanes)	Aug. '07	PPB	80	N/A	11	11	By-product of drinking water chlorination.
Chlorine	Daily '07	PPB	4000	4000	500	100 – 600	Drinking water disinfectant added for treatment.

## UNREGULATED CONTAMINANTS

Unregulated contaminant monitoring helps EPA and the California Department of Health Services to determine where certain contaminants occur and whether the contaminants need to be regulated. While the following contaminants are unregulated, there are California notification levels. Notification levels are advisory levels and not enforceable.

Contaminant	Date(s) Tested	Unit of Measurement	Notification Level	Detected Level	Range of Detection	Health Effects Language
Boron	May '03 May '04	PPB	1000	746	ND -1500	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals
Chromium VI (Hexavalent Chromium)	May '03 May '04	PPB	N/A	25	16 - 32	N/A
Radon	July '01	Pico Curies Per Liter	N/A	560	478 - 637	See Health Information on Radon below.
Vanadium	May '03 May '04	PPB	50	14	7 - 20	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

## HEALTH INFORMATION ON RADON

Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to Radon entering the home through soil, Radon entering the home through tap water will in most cases be a small source of Radon in indoor air. Radon is a known human carcinogen. Breathing air containing Radon can lead to lung cancer. Drinking water containing Radon may also cause increased risk of stomach cancer. If you are concerned about Radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of Radon in your air is 4 Pico curies per liter of air (pCi/L) or higher. There are simple ways to fix a Radon problem that aren't too costly. For additional information, call your State Radon program or call EPA's Radon Hotline (1-800-SOS-RADON).

## SECONDARY INORGANIC CONTAMINANTS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	Detected Level	Range of Detection	Source of Contaminants
Total Dissolved Solids (TDS)	July '05	PPM	1000	628	330 - 1000	Runoff/leaching from natural deposits.
Specific Conductance	July '05	uS/cm	1600	983	560 - 1400	Substances that form ions when in water.
CHLORIDE	July '05	PPM	500	116	58 – 180	Runoff/leaching from natural deposits.
IRON	July '05	PPB	1000	9	N/D - 120	Leaching from natural deposits; industrial wastes
MANGANESE	July '05	PPB	1000	3	N/D - 40	Leaching from natural deposits
SULFATE	July '05	PPM	500	116	43 - 290	Runoff/leaching from natural deposits.
ODOR – THRESHOLD	July '05	UNITS	3	1	1	Naturally occurring organic materials.
PH	July '05	Standard units	6.5 – 8.5	8	7.8 – 8.2	Leaching from natural deposits.
TURBIDITY	July '05	Standard units	5	0.11	N/D – 1.4	Soil runoff

## SODIUM AND HARDNESS

Contaminant	Date(s) Tested	Unit of Measurement	MCL	Detected Level	Range of Detection	Source of Contaminants
SODIUM	July '05	PPM	N/A	81	39 – 130	Salt present in the water is generally naturally occurring.
TOTAL HARDNESS	July '05	PPM	N/A	340	180 - 490	Is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Bicarbonate	July '05	PPM	N/A	286	170 - 370	Leaching from natural deposits
CALCIUM	July '05	PPM	N/A	74	41 - 120	Leaching from natural deposits
Magnesium	July '05	PPM	N/A	38	20 - 66	Leaching from natural deposits
Potassium	July '05	PPM	N/A	2	N/D - 3	Leaching from natural deposits

## WATER CONSERVATION PROGRAM

The water conservation program is currently underway. The Public Works Department would like to take this opportunity to thank everyone for the success of last year's program. This year's program will be the same as last year. The schedule is as follows:

- If your street address ends with an **odd** number, your watering days are Tuesday, Thursday and Saturday.
- If your street address ends with an **even** number, your watering days are Sunday, Wednesday and Friday.
- No watering is allowed on Mondays.
- No watering is allowed between the hours of 11:00 a.m. and 7:00 p.m., beginning May 1 through and including September 30.
- New plantings, such as new lawns, ground covering or bedding plants, may be watered every day before 11:00 a.m. and after 7:00 p.m., providing the following conditions are met:

New lawns, ground covering, and bedding plants shall be considered new for a period of one (1) year from planting date.

If you have questions regarding this program or need assistance programming your sprinkler timers, contact the Public Works Department at (209) 827-7056.