2007 Consumer Confidence Report

Water System Name: **Beaumont Cherry Valley Water District** Report Date: July 2008

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2007.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Well Water

Name & location of source(s): City of Beaumont, Cherry Valley and Edgar Canyon

Drinking Water Source Assessment information: Completed November 2003, updated annually

Time and place of regularly scheduled board meetings for public participation: Second Wednesday of every month at 7:00 p.m. Please see board meeting agenda posted at the B.C.V.W.D. office for meeting agenda 72 hours before all board meetings.

For more information, contact: Dwan Lee Jr. *Phone:* (951) 845-9581

TERMS USED IN THIS REPORT:

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 (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The level of a 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 which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

NTU: Nephelometric Turbidity Units

T.O.N.: Threshold odor number

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:

- *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, that 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*, that 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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, the USEPA and the state Department of Health Services (Department) 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.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	**Highest No. of detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present.
Fecal Coliform or *E. coli*	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Monitoring Completed in 2006

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ug/l)	30	<0.005	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/l)	30	0.15	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium {Cation}	2007	23.20 mg/l	15-36 mg/l	none	none	Generally found in ground & surface water
Hardness {Cation}	2007	162 mg/l	110-200 mg/l	none	none	Generally found in ground & surface water
Calcium {Cation}	2007	41.8 mg/l	32-51 mg/l	none	none	Generally found in ground & surface water
Magnesium {Cation}	2007	13.34 mg/l	7.7-17 mg/l	none	none	Generally found in ground & surface water

***Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.*

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Potassium {Cation}	2007	1.52 mg/l	1.3-1.7 mg/l	none	none	N/A

Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Fluoride {Anion}	2007	0.46 mg/l	0.3-0.8 mg/l	2 mg/l	1 mg/l	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. **Health effects-** Some people who drink water containing fluoride in excess of the federal MCL of 4mg/l over many years may get bone disease, including pain and tenderness of the bones. Children who drink water contaning fluoride in excess if the state MCL of 2 mg/l may get mottled teeth.
Nitrate {Anion}	2007	6.86 mg/l	2.5-16 mg/l	45 mg/l	none	Runoff, leaching from fertilizer use; leaching from septic tank and sewage; erosion of natural deposits. **Health effects-** Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.
Alkalinity {Anion}	2007	166 mg/l	140-180 mg/l	none	none	N/A
Hydroxide {Anion}	2007	<3 mg/l	0-<3 mg/l	none	none	N/A
Carbonate {Anion}	2007	<3 mg/l	0-<3 mg/l	none	none	N/A
Bicarbonate {Anion}	2007	200 mg/l	170-220 mg/l	none	none	N/A
Alkalinity {Anion}	2007	166 mg/l	140-180 mg/l	none	none	N/A
Monoacetic Acid {Disinfection Byproduct}	2007	4.7 ug/l	0-6.1 ug/l	none	none	Byproduct of disinfection.
Monobromoacetic Acid {Disinfection Byproduct}	2007	1.25 ug/l	0-1.4 ug/l	none	none	Byproduct of disinfection.
Bromodichloromethane {Disinfection Byproduct}	2007	1.19 ug/l	0-1.8 ug/l	none	none	Byproduct of disinfection.
Halocetic Acids {HAA5} {Disinfection Byproduct}	2007	7.9 ug/l	0-7.9 ug/l	60 ug/l	none	Byproduct of disinfection. **Health effects-** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Dibromochloromethane {Disinfection Byproduct}	2007	0.75 ug/l	0-1.2 ug/l	none	none	Byproduct of disinfection.
Dichloroacetic Acid {Disinfection Byproduct}	2007	1.4 ug/l	0-1.4 ug/l	none	none	Byproduct of disinfection.
Chloroform {Disinfection Byproduct}	2007	1.89 ug/l	0-3.2 ug/l	none	none	Byproduct of disinfection.
Total Trihalomethanes {Disinfection Byproduct}	2007	2.6 ug/l	0-6.6 ug/l	100 ug/l	none	Byproduct of disinfection. **Health effects-** Some people who use water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Cyanide {General Inorganics}	2007	100 ug/l	0-100 ug/l	150 ug/l	150 ug/l	Discharge from steel/metal, plastic and fertilizer factories. **Health effects-** Some people who drink water containing cyanide in excess of the MCL over many years may experience nerve damage or thyroid problems.

Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate as N {Nutrients}	2007	100 ug/l	0-100 ug/l	1000 ug/l	1000 ug/l	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. **Health effects-** Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Chromium {Metals and Metalloids}	2007	8.36 ug/l	3.3-13 ug/l	50 ug/l	none	Erosion of natural deposits; chrome plating; discharge from steel and pulp mills. **Health effects-** Some people who use water containing chromium in excess of the MCL over many years may experience allergic dermatitis.
Silver {Metals and Metalloids}	2007	10 ug/l	0-10 ug/l	100 ug/l	none	Industrial discharges.
Aluminum {Metals and Metalloids}	2007	50 ug/l	0-50 ug/l	1000 ug/l	none	Erosion of natural deposits; residue from some surface water treatment processes. **Health effects-** Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
Arsenic {Metals and Metalloids}	2007	2 ug/l	0-2 ug/l	50 ug/l	4.0 ug/l	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes. **Health effects-** Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.
Barium {Metals and Metalloids}	2007	100 ug/l	0-100 ug/l	1000 ug/l	200 ug/l	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits. **Health effects-** Some people who drink water containing barium in excess of the MCL over many years experience an increase in blood pressure.
Beryllium {Metals and Metalloids}	2007	1 ug/l	0-1 ug/l	4 ug/l	1.0 ug/l	Discharge from metal refineries, coal-burning factories, and from electrical, aerospace, and defense industries. **Health effects-** Some people who drink water containing beryllium in excess of the MCL over many years may develop intestinal lesions.
Cadmium {Metals and Metalloids}	2007	1 ug/l	0-1 ug/l	5 ug/l	4.0 ug/l	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and from metal refineries; runoff from waste batteries and paints. **Health effects-** Some people who drink water containing cadmium in excess of the MCL over many years may experience kidney damage.
Copper {Metals and Metalloids}	2007	50 ug/l	0-50 ug/l	1000 ug/l	300 ug/l	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. **Health effects-** Copper is an essential nutrient, but some people who drink water containing copper in excess of the MCL over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the MCL over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Iron {Metals and Metalloids}	2007	100 ug/l	0-100 ug/l	300 ug/l	none	Leaching from natural deposits; industrial waste. **Health effects-** N/A
Mercury {Metals and Metalloids}	2007	1 ug/l	0-1 ug/l	2 ug/l	1.2 ug/l	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland. **Health effects-** Some people who drink water containing inorganic mercury in excess of the MCL over many years may experience mental disturbances, or impaired physical coordination, speech and hearing.

Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Manganese {Metals and Metalloids}	2007	20 ug/l	0-20 ug/l	50 ug/l	none	Leaching from natural deposits. **Health effects-** N/A
Nickel {Metals and Metalloids}	2007	10 ug/l	0-10 ug/l	100 ug/l	12.0 ug/l	Erosion of natural deposits; discharge from metal factories. **Health effects-** Some people who drink water containing nickel in excess of the MCL over many years may experience liver and heart disease.
Lead {Metals and Metalloids}	2007	5 ug/l	0-5 ug/l	none	2.0 ug/l	Internal corrosion of household plumbing systems; discharge from industrial manufacturers, erosion of natural deposits. **Health effects-** Infants and children who drink water containing lead in excess of the MCL may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
Antimony {Metals and Metalloids}	2007	6 ug/l	0-6 ug/l	6 ug/l	2.0 ug/l	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder. **Health effects-** Some people who drink water containing antimony in excess of the MCL over many years may experience increases in blood cholesterol and decreases in blood sugar.
Selenium {Metals and Metalloids}	2007	5 ug/l	0-5 ug/l	50 ug/l	none	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive). **Health effects-** Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years may experience hair or fingernail losses, numbness in fingers or toes, or circulation system problems.
Thallium {Metals and Metalloids}	2007	1 ug/l	0-1 ug/l	2 ug/l	1.0 ug/l	Leaching from ore-processing sites; discharge from electronics, glass and drug factories. **Health effects-** Some people who drink water containing thallium in excess of the MCL over many years may experience hair loss, changes in the blood, or kidney, intestinal, or liver problems.
Zinc {Metals and Metalloids}	2007	50 ug/l	0-50 ug/l	5000 ug/l	none	Runoff/leaching from natural deposits; industrial waste. **Health effects-** N/A
Gross Alpha {Radionuclide}	2007	1.38 pCi/L	0.73-2.9 pCi/L	15 pCi/L	none	Erosion of natural deposits. **Health effects-** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium {Radionuclide}	2007	1.26 pCi/L	0.11-3.16 pCi/L	20 pCi/L	4.3 pCi/L	Erosion of natural deposits. **Health effects-** Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Radium 226 {Radionuclide}	2007	0.103 pCi/L	0.02-0.22 pCi/L	15 pCi/L	5.0 pCi/L	Erosion of natural deposits **Health effects-** N/A
Radium 228 {Radionuclide}	2007	0.159 pCi/L	0.01-0.49 pCi/L	5 pCi/L	1.9 pCi/L	Erosion of natural deposits **Health effects-** N/A

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Turbidity {General Physical}	2007	0.23 NTU	0.20-0.38 NTU	5 NTU	none	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. **Health effects-** Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection 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.
Odor {General Physical}	2007	1 T.O.N.	0-1 T.O.N.	3 T.O.N.	3 T.O.N.	Naturally-occurring organic materials.
Color {General Physical}	2007	3 color units	0-3 color units	15 color units	none	Naturally-occurring organic materials.
Chloride {Anion}	2007	7.36 mg/l	5.9-13 mg/l	none	none	Runoff/leaching from natural deposits; seawater influence.
Sulfate {Anion}	2007	18.88 mg/l	8.3-45 mg/l	none	none	Runoff/leaching from natural deposits; industrial wastes.
Specific Conductance (umhos/cm or micro-mhos) {Aggregate Properties}	2007	350 umhos/cm	330-520 umhos/cm	1,600 umhos/cm	1,600 umhos/cm	Substances that form ions when in water.
PH (PH units) {Aggregate Properties}	2007	7.8 PH units	7.3-8.0 PH units	none	none	N/A
MBAS (Foaming agents) {Surfactants}	2007	0.05 mg/l	0-0.05 mg/l	0.5 mg/l	none	Municipal and industrial waste discharge.
Total Dissolved Solids or TDS {Solids}	2007	248 mg/l	180-340 mg/l	1000 mg/l	none	Runoff/leaching from natural deposits.

***Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on 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 the 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. USEPA/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).

Beaumont Cherry Valley Water District has a nine year waiver to sample Synthetic Organic Chemicals (soc) from January 1, 2002 through December 31, 2010.

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

In 2006 the District experienced increased nitrate levels that have been traced to on-site septic systems. Levels at two separate sources have exceeded ½ the MCL of (45mg/l). On March 28, 2006 well 21 tested at 32mg/l and on May 31, 2006 well 16 tested at 40mg/l. Title 22 of the California Regulations Related to Drinking Water require, "For public water systems using groundwater, the repeat monitoring frequency shall be for at least one year following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. After four consecutive quarterly samples are less than the MCL, a system may request that the Department reduce monitoring frequency to annual sampling".

The District is voluntarily blending the water from the two sources mentioned above with other sources which have maintained acceptable Nitrate levels. Since January 2006 the District increased monitoring at wells 16 and 21 from quarterly to monthly and in March 2006 the District decided to further increase monitoring to biweekly at the two sources and also the blended water from their respective storage tanks.

The District experienced increased nitrate levels from well 16 and well 21 again in 2007. The highest level of detection from well 16 was 43 mg/l and the highest level of detection from well 21 was 32 mg/l during the year of 2007. The District voluntarily blended the water from these two sources with other sources which have maintained acceptable nitrate levels. The average level of detection from all 2007 nitrate samples for wells 16 and 21 as well as the average level of detection from blended water are as fallows:

The average results for 2007 are as follows:

We11 16, 24.74mg/l Well 21, 11.75mg/l

Blended Water:

Vineland Reservoir, 8.47mg/l Cherry Reservoir, 10.40mg/l

Typical source of contamination,
Runoff, leaching from fertilizer use; leaching from septic tank and sewage; erosion of natural deposits. **Health effects**- Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Pregnant women who drink water containing nitrate in excess of the MCL may experience anemia.