Wallace Community Services District
2008 Annual Water Quality Report

The Wallace Community Services District (District) tests 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 through December 31, 2008.

The Safe Drinking Water Act establishes standards and regulations for water purveyors to insure the safety and quality of drinking water. It also requires all public water systems to issue an annual report to customers telling them what substances are in their water and in what amounts. For questions or additional information regarding this Consumer Confidence Report (CCR) please call the General Manager of the WCSD at (209) 763-2882.

Where does Wallace Community Services District get its water?
The water supply for the Community of Wallace originates from ground water aquifer(s). In most cases a ground water aquifer is a porous layer of course sand and gravel deep below the surface, which allows the flow of water. The aquifer(s) from which the Wallace Community Services District draws water are between 170 feet and 370 feet below the ground surface. Groundwater is removed from an aquifer by a submersible pump installed inside the well. The Wallace Community Services District has three water wells located in different areas of the subdivision. These wells are numbered 1, 2 and 3. Well #2 is the active well currently providing water for the community. Well #3 is a standby well which is currently being certified for full time service and Well #1 is not yet connected to the system.

Does our drinking water go through any treatment process? Yes.
The water pumped directly from our wells exceeds the State of California's limits for iron and manganese. In the past chlorine and lime was used to react with the iron and manganese in a process known as oxidation. This process converts soluble iron and manganese into a precipitate that is filtered out of the water with a proprietary media filter. In March of 2006 we stopped using lime and began using potassium permanganate in addition to chlorine to remove iron and manganese with a different proprietary media. Chlorine in addition to being part of the process for removing iron and manganese provides for disinfection, corrosion protection in our system and helps to assure the safety of our water. Although potassium permanganate removes iron and manganese more effectively than our previous process of lime and chlorine, it can create pink water. See the section titled "Pink Water" on page 4 for more information.

Drinking Water Source Assessment
There have been many studies concerning our Drinking Water, its source and its treatment. We have copies of those studies in our office and they can be made available by request. Our wells have a very low vulnerability to contamination due to their locations. We are continuing to collect ground water level data from our monitoring program. While no conclusions can be drawn from our data at this time it seems as though our ground water levels are not changing. It will be very interesting to see data in future years.

Public Participation
The Wallace Community Services District Board of Directors holds regular meetings on the third Thursday of each month at Mr. Mark Fusselman's Barn at 9500 Wallace Lake Drive, Wallace, CA. Meeting time is 7:00 PM. This is a change. All meetings are properly noticed in conspicuous locations, including postings at our front entrance. For information please contact our office at 209 763 2882 or email wallacecsd@comcast.net.

The typical sources of drinking water (both tap water and bottled water) are made from water from 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. This is good information to remember as you travel, however our water is single source from our wells and as such is very safe.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, 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 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, are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants are naturally occurring or are 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 California State Department of Public Health (the "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 sampling year of 2008. We sample from three basic locations: #1, our wells, #2 directly after treatment and #3 at designated locations in our system. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department requires the District to monitor for certain contaminants less frequently than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, some of the data, though representative of the water quality, are more than one year old. There is a table of abbreviations and terms on p5.

Water Quality Analysis of the Treated Water in our Community:

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	(0)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. coli	(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

Lead and Copper (These results are from testing in 2007and will not change for 3 years)	**No. of samples collected**	**90th percentile level detected**	**No. Sites exceeding AL**	**AL**	**MCLG**	**Typical Source of Contaminant**
Lead (ppb)	6	7.05 ug/l	0	15 ug/l	2 ug/l	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.

Copper (ppm)	6	0.37 mg/l	0	1.3 mg/l	0.17 mg/l	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Contaminant	Sample Date	Level Detected	MCL	PHG MCLG	Likely Source of Contamination
Sodium Well #2 Sodium Well #3	8-6-08 8-6-08	19 mg/l 18 mg/l	none	none	Generally found in ground and surface water
Hardness Well #2 Hardness Well #3	8-6-08 8-6-08	47 mg/l 47 mg/l	none	none	Generally found in ground and surface water

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Barium Well #2 Barium Well #3	8-6-08 8-6-08	179 ppb 140 ppb		1000 ppb	1000 ppb (2000 ppb)	Discharges of oil drilling wastes and from metal refineries, and from electrical, aerospace and defense industries
Total Trihalomethane	7/9/07	16.8 ppb		80 ppb	N/A	Byproducts of Drinking water chlorination
Haloacetic Acids	7/9/07	3.9 ppb		10 ppb	N/A	Byproducts of drinking water disinfection

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum Well #2 Aluminum Well #3	8-6-08 8-6-08	<50 ppb <50 ppb		1000 ppb	N/A	Erosion of natural deposits; residue from some surface water treatment processes
Iron Well #2 Ave. Iron Treated 2008 Ave. Iron Well #3 Ave.	2008 2008 2008	733 ppb 42 ppb 1495 ppm	420 to 2690 <20 to 96 961 to 2400	300 ppb	N/A	Leaching from natural deposits; industrial waste.
Mn Well #2 Ave Mn Treated 2008 Ave. Manganese Well #3	2008 Ave. 2008	487ppb 9.3 ppb 585 ppb	370to 550 6.4 to 22 560 to 630	50 ppb	N/A	Leaching from natural deposits
Chloride Well #2 Chloride Well #3	8-6-08	8.6 ppm 7.8 ppm		500 ppm	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate Well #2	8-6-08	6.9 ppm		500 ppm	N/A	Runoff/leaching from natural deposit; industrial wastes

Sulfate Well #3		13 ppm				

Additional 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 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).

Pink Water

According to Carus Chemical Company, potassium permanganate ($KMnO_4$) is approved and widely used in drinking water for the treatment of taste and odor causing compounds and for the removal or iron and manganese that cause staining of plumbing fixtures. Potassium permanganate is usually added to raw water and is completely consumed in the treatment process. Under normal conditions no residual potassium permanganate is in the final treated water.

On occasion, an overfeed of potassium permanganate will create pink water. This overfeed can result from a change in raw water quality, improper dosing, or mechanical failure. The concentration of potassium permanganate that may ultimately leave the treatment process will normally be in the non-detect range. Occasionally levels which are below the MCL will still impart a pink color to the water and will generate customer concerns.

Potassium permanganate is not classified as a carcinogen by OSHA, NPT, or IARC*. There is no human toxicological data specific to potassium permanganate. The available data for human toxicity is mostly related to manganese. According to the MSDS sheet prepared by the Carus Chemical Company, the "fatal dose by ingestion of manganese is estimated to be 10 grams or 0.35 ounces". To reach that level with pink water containing a 0.5 mg/l potassium permanganate residual concentration, a person would have to drink over 5,200 gallons of water at one time.

A chronic or long term oral dose of 0.1 mg/kg/day was derived by U.S. EPA for manganese. For a 150 lb person, this calculates to 7 mg of daily manganese intake. At a 0.5 mg/l permanganate concentration, the pink water would contain about 0.175 mg/l of manganese. The person would have to drink almost 10 gallons of pink water everyday to show adverse chronic effects.

If you notice pink water at your tap, do not drink it and contact the Wallace Community Service District so that we can make prompt adjustments to the potassium permanganate feed rate and begin distribution system flushing. If staining of laundry and plumbing fixtures occurred use a solution of 1/3 white vinegar, 1/3 of 3% hydrogen peroxide, and 1/3 water to remove these stains. For further information on the CAIROX® potassium permanganate product characteristics contact Carus Chemical Company at 1-800-435-6856

Summary Information for Contaminants Exceeding an MCL or AL; or a Violation of any Treatment of Monitoring and Reporting Requirements

On no occasion during 2008 was iron or manganese found in the distribution system at levels that exceed their respective MCL's of 300 ug/l for iron and 50 ug/l for manganese. This year (2008) our average level for iron was

below 15% and for manganese 20% of MCL. The iron and manganese MCL's were set to protect you against unpleasant aesthetic effects such as color, taste, odor and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. The high iron and manganese levels are due to leaching of natural deposits in soil and ground water.

*Occupational Safety & Health Administration (OSHA), National Toxicology Program (NTP), International Agency for research on Cancer (IARC).

Terms Used In This Report

Average of all tests (Ave.) is all the recorded tests during the year averaged.
Maximum Contaminant Level 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.
Maximum Residual Disinfectant Level (MRDL) is the level of a disinfectant added for water treatment that may be exceeded at the consumer's tap.
Maximum Residual Disinfectant Level Goal (MRDLG) is 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.
Maximum Contaminant Level (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.
Public Health Goal (PHG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.
Regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers mandatory action requirements that the District must follow.
Detection Limit is the smallest "detectable level" of a contaminant by standard laboratory test procedures.
Primary Drinking Water Standards are maximum levels of contaminants that, in the judgment of the Department of Health Services, may have adverse health effects on the general public.
Secondary Drinking Water Standards are maximum levels of contaminants that, in the judgment of the Department of Health Services, are necessary to protect the public welfare.
Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions
PPM, ppm, mg/l are designations of concentration meaning parts per million (ppm) which is equal to milligrams per liter (mg/l)
PPB, ppb, ug/l are also designations of concentration, parts per billion (ppb), equal to micrograms per liter (ug/l)

Septic Tanks are Private Property and your Responsibility

The Wallace Community Services District's wastewater treatment plant processes liquid waste only. Each residential and commercial lot has a septic tank to trap and hold solid waste. Some septic tanks have a pump that pushes the tank effluent to the collection system. Over time (5 to 25 years) a septic tank will fill with biological solids. The solid waste collected in the septic tank must be removed and disposed of by a licensed septic contractor. Septic tanks are considered private sewer facilities and each property owner is responsible to maintain them in good working order. Private sewer facilities include the septic tank, pumps, electrical controls, pipes, valves and any other sewer conveyance equipment on private property. New state regulations require a septic tank inspection program. We now have a septic tank inspection program adopted and we will be inspecting tanks soon. We will start with the oldest tanks in the system first. Please attend our board meetings to discuss this or any other item.

Encroachment Permits are Required and Strictly Enforced

Prior to performing any work on a District Facility, in the right-of-way or within the open space you must be issued an Encroachment Permit by the District. Encroachment applications can be requested by calling the WCSD General Manager at 209 763-2882. An encroachment fee of $250.00 must accompany the application. The fee covers costs

associated with the application process, plan review and site inspection to confirm the work is completed in accordance with District Improvement Standards.