

Chemeketa Park Mutual Water Company

2011 Consumer Confidence Report

Report Date: July 15th 2012

Water System Name: Chemeketa Park Mutual Water Company
Water System ID #: 4300517

Water System Operator: Tyler Boswell, Allied Water Systems Management

Chemeketa Park Mutual Water Company (CPMWC) tests the drinking water for its customers as required by State and Federal Regulations. This report shows the results of our monitoring during 2011.

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

Type of water source in use: Mountain Surface Water

Name and location of source(s): Moody Gulch is the primary source, and Los Gatos Creek is our back-up source. The Moody Gulch intake is located at the intersection of Old Santa Cruz Hwy. and Ogallala Warpath. The Los Gatos Creek Pump station is directly below Chemeketa Park at the end of Assiniboine Trail. Both supply raw water to CPMWC's Ogallala Filtration Plant for treatment, storage and distribution.

Time and place of regularly scheduled board meetings for public participation: Board meetings are held the 2nd Thursday of each month at 8:00 pm in the "Chemeketa Park Clubhouse" located near the intersection of Apache Trail and Comanche Trail, Los Gatos CA 95033.

For more information, contact: Tyler Boswell, (Certified System Operator II) at (408) 305-3200.

As a water distributor CPMWC, a non-profit mutual benefit corporation, is mandated by the California Department of Health Services (CDHS) to produce an annual Consumer Confidence Report (CCR). CPMWC is committed to supplying water that meets or surpasses all state and federal drinking water standards. The water that CPMWC distributes is collected from Moody Gulch and Los Gatos Creek in the Santa Cruz Mountain watershed. The water is then treated at the CPMWC Ogallala filtration plant, located along Moody Gulch Creek adjacent to the intersection of Ogallala Warpath and Old Santa Cruz Highway. Treated water is pumped to CPMWC's storage tanks at upper Ogallala Warpath, and distributed to residents via distribution pipelines. The water (treated at the CPMWC treatment plant) met or surpassed all state, federal filtration and water quality standards throughout 2011.

CPMWC provides continuous monitoring of, and daily tests for "free chlorine" content, monthly bacteriological testing, annual testing for over 70 volatile organic compounds (VOC's), and triennial lead/copper residual testing. These daily, monthly, yearly and triennial tests ensure that the quality of water is maintained from the point of treatment and storage, to each customer. Each day, water samples are tested at one of three sample points for free (available) chlorine (mg/L) in the water. Monthly bacteriological tests ensure that no coliform bacteria are present within the system. The triennial lead/copper residual test looks for potential

deterioration of either lead or copper plumbing materials found in older homes. All test-result data is submitted to the California Department of Public Health, Drinking Water Field Operations Branch, for review.

The results from CPMWC's 2011 monthly BacT's are as follows:

The monthly sampling results for the Total Coliform Bacteria equaled 0 (zero).

The monthly sampling results for Fecal Coliform or E. coli equaled 0 (zero).

Lead/Copper testing: Last performed in 2011.

	90 th percentile	Action level
Lead	ND (Not Detected)	0.015mg/ L
copper	.108mg/L	1.1mg/ L

Daily free chlorine analysis: A monthly report of the daily free chlorine analysis is filed with the California Department of Public Health each month. Copies are available by contacting the system operator at 408-305-3200 .

Special Populations: 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, persons with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water containing contaminants. 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 at (800) 426-4791. Additional information is available from the California Department of Public Health's Division of Communicable Disease Control at (510) 540-2566 or the Santa Clara County Department of Environmental Health at (408) 918-3400.

Reminders for home dialysis patients and aquarium owners: Chlorine may be present in water distributed by CPMWC. It is used to protect public health by destroying disease-causing organisms. Except for a slight chlorinous taste or odor, this disinfectant will not cause any problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before the water can be used in aquariums or kidney dialysis machines. Before filling an aquarium or fishpond, the disinfectant must be removed. A local tropical fish store can help determine the best water treatment for particular fish. For use with properly conditioned kidney dialysis equipment, adding ascorbic acid or using a granular activated carbon filter should make the water safe for dialysis. Patients should check with their doctor or dialysis technician to be certain their home equipment is adequate and that proper tests are performed every time it is used.

Nitrate: Nitrate in drinking water at levels of 45 ppm (parts per million) or greater is a health risk for infants less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. If you are caring for an infant or are pregnant, you should ask for advice from your health care provider. All water that is supplied from CPMWC is substantially below 45 ppm MCL (Maximum Contamination Limit).

DBP's: (Disinfection By-Products) are tested quarterly and then averaged over the same period to create a Running Annual Average (RAA). DPB's are divided into two groups: Total Trihalomethanes (TTHMs) and Haloacetic Acids-(five) (HAA5). RAA levels detected for both groups were below the state MCL (Maximum Contaminant Level) for 2011. Efforts to further reduce DBP levels are ongoing through increased frequency of line flushing and careful monitoring of chlorine levels in the distribution system.

DBP Report:

DPB's for 2011	Running Annual Average (RAA)	MCL
Trihalomethanes (TTHMs)	30.5 ug/L (parts per billion)	80
Haloacetic Acids-five (HAA5)	11.0 ug/L (parts per billion)	60

Treatment of Surface Water Report:

Sampling Results Showing Treatment Of Surface Water Sources	
<i>Treatment Technique*</i>	CPMWC's Ogallala water treatment plant is a Neptune Microfloc Water Boy Filter Plant. The treatment process consists of a flow-through rapid mix chamber, coagulation, flocculation, sedimentation via tube settlers and multimedia filtration.
<i>Turbidity Performance Standards**</i> (that must be met through the water treatment process)	<u>Turbidity of filtered water must:</u> 1- Be less than or equal to 0.3 NTU In 95% of measurements in a month. 2- Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1	100%
Highest single turbidity measurement during the year	.271
The number of violations of any surface water treatment requirements	0 violations

* A required process intended to reduce the level of a contaminant in drinking water.

** Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results that meet performance standards are considered to be in compliance with filtration requirements.

Definitions:

Public Health Goal (PHG): The level of a contaminant in drinking water for which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency. PHGs are purely health-based objectives and may not be technically or economically feasible to achieve. Risk management factors used in setting maximum contaminant levels are not used, and public water systems are not required to meet PHGs.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water for which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency. MCLGs are similar to PHGs, and public water systems are not required to meet them.

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. Primary MCLs are set as close to the public health goals and maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumers tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The maximum level of a disinfectant added for water treatment for which there is no known or expected risk to health, set by U.S. Environmental Protection Agency.

Primary Drinking Water Standard: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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

Regulatory Action Level (AL): Action levels are the concentration of a contaminant that triggers a specific treatment technique or other requirement. Action levels are set for some contaminants, such as lead and copper.

Parts Per Million (ppm): One part per million is the same as one milligram per liter (mg/L). One ppm corresponds to a single penny in \$10,000 or one minute in two years.

Detection Limit for Purposes of Reporting (DLR): The lowest level of a constituent that the Department of Health Services requires to be reported.

Nephelometric Turbidity Units (NTU): A measure of cloudiness of the water.

Not Detected (ND): If a constituent is not measured at or above a DLR, it is reported as Not Detected.

Not Analyzed (NA): Source designated non-vulnerable or testing not required.

US Environmental Protection Agency Notice: 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 EPA's Safe Drinking Water Hotline at 800-426-4791.

The sources of drinking water (both tap 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, which 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.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential areas.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals are byproducts of commercial and industrial processes, and can also come from gas stations, urban stormwater runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or the result of mining activities.

In order to ensure that tap water is safe to drink, USEPA and the California 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.

Perchlorate	Reporting Units	Test results	DLR	Sampled
Los Gatos Creek	PPB	ND	4.0	3/25/2011
Moody Creek	PPB	ND	4.0	3/25/2011

Drinking Water Contaminants Detected During Most Recent Samplings

Regulated Contaminants with Primary Standards—Mandatory Health-Related Standards¹

Parameter	Units	Secondary		Storage Tanks	Moody Gulch	Los Gatos Creek	Typical Sources
		MCL	PHG or MCLG	(treated) 9/14/2011	{untreated} 3/15/2011	{untreated} 3/15/2011	
Radioactive Radium 228 (Sampled 6/14)	PCi/L	2	N/A	ND	ND	ND	
Inorganic Chemicals							
Aluminum	ppm	1000	600	88	ND	ND	Erosion of natural deposits, residue from some surface water treatment processes
Antimony	ppm	0.006	None	ND	ND	ND	Refineries: fire retardants; ceramics; electronics; solder
Arsenic	ppm	0.01	None	ND	ND	ND	Erosion of natural deposits
Barium	ppm	1	0.02	ND	ND	ND	Erosion of natural deposits
Beryllium	ppm	0.004	0.001	ND	ND	ND	Discharge from metal refineries and from electrical, aerospace and defense industries
Cadmium	ppm	0.005	0.003	ND	ND	ND	Internal corrosion of galvanized pipes; erosion of natural deposits; runoff from waste batteries and paints
Chromium	ppm	0.05	0.01	ND	ND	ND	Erosion of natural deposits.
Copper	ppm	1	0.17	ND	ND	ND	Erosion of natural deposits. Leaching from wood preservatives.
Cyanide	ppm	0.2	0.15	ND	ND	ND	Discharge from steel/metal, plastic and fertilizer factories
Fluoride	ppm	1	1	0.29	0.25	0.15	Erosion of natural deposits
Mercury	ppm	0.002	0.001	ND	ND	ND	Erosion of natural deposits; discharge from refineries and factories; runoff from land fills and cropland
Nickel	ppm	0.1	0.012	ND	ND	ND	Erosion of natural deposits; discharge from metal
Nitrate (NO ₃)	ppm	1.6	45	ND	3.5	ND	Runoff and leaching from fertilizer use, erosion of natural deposits
Selenium	ppm	0.05	0.05	ND	ND	ND	Erosion of natural deposits
Thallium	ppm	0.002	0.001	ND	ND	ND	Discharge from electronics, glass and drug factories

Parameter	Units	Secondary		Storage Tanks	Moody Gulch	Los Gatos Creek	Typical Sources
		MCL	PHG or MCLG	(treated) 9/14/2011	{untreated} 3/15/2011	{untreated} 3/15/2011	
Color	-	15 units	None	ND	13.0	ND	Naturally occurring organic materials.
Hardness (CaCO ₃)	ppm	N/A	None	200	240	320	Erosion of natural deposits
Foaming Agents (MBAS)	ppm	.5	None	N/A	N/A	N/A	Municipal and industrial waste discharges.
Iron	ppm	.3	None	ND	120	84	Erosion of natural deposits
Manganese	ppm	.05	None	ND	21	73	Leaching from natural deposits
Odor		3 units	None	ND	2.0	ND	Naturally occurring organic materials.
Silver	ppm	.1 ug/L	None	ND	ND	ND	Industrial discharges
Sodium	ppm	N/A	None	28	28	34	Erosion of natural deposits
Turbidity		5 units		.42	1.4	9.4	
Zinc	ppm	5	None	ND	ND	0.1	Runoff and erosion of natural deposits
Total Dissolved Solids	ppm	1000	None	330	280	330	Runoff and erosion of natural deposits
Chloride	ppm	250	None	15	15	13	Erosion of natural deposits
Sulfate	ppm	250	None	84	110	95	Erosion of natural deposits
Boron	ppm	N/A	N/A	ND	ND	150	

Complete General Physical, Mineral and Inorganics Test Results for 2011

Date Sample collected	9/14/2011	3/15/2011	3/15/2011				
Water Source Tested	Storage Tanks	Moody Gultch	Los Gatos Creek				
General Mineral	Sample Results	Sample Results	Sample Results	Units	(RL) Reporting limit	State Drinking Water Limits	Analysis Method
pH	8.1	8.1	7.6	pH Units	0.1	-	EPA 150.1
Specific Conductance (EC)	510	460	560	uS/cm	1.0	1600	EPA 120.1
Hydroxide as OH	ND	ND	ND	mg/L	1.7	-	EPA 310.1
Carbonate as CO3	ND	ND	ND	mg/L	1.7	-	EPA 310.1
Bicarbonate as HCO3	200	150	310	mg/L	1.7	-	EPA 310.1
Total Alkalinity as CaCO3	170	120	250	mg/L	1.7	-	EPA 310.1
Hardness	200	180	260	mg/L	5.0	-	SM 2340 B
Total Dissolved Solids	280	280	310	mg/L	10	1000	EPA 160.1
Nitrate as NO3	1.6	3.4	ND	mg/L	1.0	45	EPA 300.0
Chloride	15	14	10	mg/L	1.0	500	EPA 300.0
Sulfate as SO4	84	95	42	mg/L	1.0	500	EPA 300.0
Fluoride	0.32	0.25	0.15	mg/L	0.10	2	EPA 300.0
Calcium	54	49	63	mg/L	0.50	-	EPA 200.7
Magnesium	16	13	25	mg/L	0.50	-	EPA 200.7
Potassium	1.8	2.3	1.8	mg/L	0.50	-	EPA 200.7
Sodium	28	23	16	mg/L	5.0	-	EPA 200.7
Iron	ND	120	65	ug/L	50	300	EPA 200.7
Manganese	ND	21	100	ug/L	20	50	EPA 200.7
Copper	ND	ND	ND	ug/L	50	1000	EPA 200.7
Zinc	ND	ND	ND	ug/L	50	5000	EPA 200.7
Inorganics							
Nitrate/Nitrite as N	ND	.77	0.20	mg/L	0.10	10	EPA 300.0
Arsenic	ND	ND	ND	ug/L	2.0	10	EPA 200.8
Barium	ND	ND	ND	ug/L	100	1000	EPA 200.7
Boron	ND	ND	ND	ug/L	100	-	EPA 200.7
Cadmium	ND	ND	ND	ug/L	1.0	5	EPA 200.8
Chromium	ND	ND	ND	ug/L	1.0	50	EPA 200.8
Cyanide (total)	ND	ND	ND	ug/L	100	200	SM 4500-CN F
Lead	ND	ND	ND	ug/L	5.0	-	EPA 200.8
Mercury	ND	ND	ND	ug/L	1.0	2	EPA 245.1
Selenium	ND	ND	ND	ug/L	5.0	50	EPA 200.8
Silver	ND	ND	ND	ug/L	10	100	EPA 200.7
MBAS (Surfactants)	ND	ND	ND	mg/L	0.025	0.5	EPA 425.1
Aluminum	88	ND	55	ug/L	50	1000	EPA 200.7
Antimony	ND	ND	ND	ug/L	6.0	6	EPA 200.8
Beryllium	ND	ND	ND	ug/L	1.0	4	EPA 200.7
Nickel	ND	ND	ND	ug/L	10	100	EPA 200.7
Thallium	ND	ND	ND	ug/L	1.0	2	EPA 200.8
Nitrite as N	.37	ND	.78	mg/L	0.10	10	EPA 300.0
General Physical							
Color	ND	ND	4.0	Color Units	3.0	-	EPA 110.2
Threshold Odor No.	ND	ND	ND	T.O.N.	1.0	-	EPA 140.1
Turbidity	0.42	1.8	.97	NTU	0.10	-	EPA 180.1

