SURFACE WATER SOURCES

The City of Poway relies on two surface water sources: water that is imported from the San Diego County Water Authority and local rainfall captured by Lake Poway. The imported water comprises the majority of the water needs of the community, accounting for 99.5% of the raw water supply.

The raw water is received from the Northern California Aqueduct and Colorado River Systems. These sources of water are pumped to the Lester J. Bergland Water Treatment Plant and to Lake Poway for storage.

To ensure a safe drinking water supply, the raw water undergoes a series of treatment processes including: coagulation, flocculation, sedimentation, filtration, taste/odor control, corrosion control and disinfection.

These treatment processes ensure that water of the highest quality is available to all our customers.

WATER QUALITY MONITORING

The California Department of Health Services is responsible for enforcing Drinking Water Quality Regulations, as set forth by the United States Environmental Protection Agency (USEPA).

The (USEPA) regulations are composed of primary and secondary standards: Primary standards relate to the protection of public health. These standards specify limits for substances in water that may be harmful to humans if consumed in excess of those limits.

Secondary standards relate to aesthetic qualities of water such as taste, odor, or clarity. These standards specify limits for substances that may influence consumer acceptance of the water.

THE DISINFECTION PROCESS

The City of Poway employs two methods of disinfection. The first, chlorine, effectively eliminates water-borne diseases from the public water supply. The second, chloramines, a combination of chlorine and ammonia, further improves the quality of our water supply and reduces the formation of disinfection-by-products.

REQUIRED 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. 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 and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium (a micro-organism which can cause gastrointestinal illness, but which is eliminated through effective treatment including filtration, sedimentation, and disinfection) are available from the Safe Drinking Water Act Hotline at (800) 426–4791.

Contaminants that may be present in source water before we treat it are:

+ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic tanks systems, agricultural livestock operations and wildlife.
+ Inorganic contaminants, such as salts and metals, which may be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
+ Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.
+ Radioactive contaminants, which are naturally occurring.
+ Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water run-off, and septic tanks.

City of Poway Annual Water Quality Report - 2002

We are pleased to send you our 2002 Water Quality Report. This brochure explains how drinking water provided by the City of Poway is of the highest quality. Included is a listing of results from water-quality tests as well as an explanation of where our water comes from and tips on how to interpret the data.

At the City of Poway, we routinely monitor our water supplies for the entire range of elements that have the potential to degrade the quality of your water. If a potential problem is detected, our water treatment personnel take measures to eliminate the problem.

We do not settle for meeting health and safety standards - our goal is to *exceed* them in every instance. For additional information please call Kevin O'Reilly, Water Treatment Plant Supervisor, at the City of Poway Lester J. Berglund Water Treatment Plant (858) 679-5452.

CITY OF POWAY ANNUAL WATER QUALITY REPORT 2002

PARAMETER	UNITS	STATE MCL	PHG [MCLG]	TREATED WATER BEFORE DISTRIBUTION SYSTEM AVERAGE	TREATED WATER BEFORE DISTRIBUTION SYSTEM RANGE	TREATED WATER AFTER DISTRIBUTION SYSTEM AVERAGE	TREATED WATER AFTER DISTRIBUTION SYSTEM RANGE	LAKE POWAY WATER AVERAGE	LAKE POWAY WATER RANGE	IMPORTED WATER AVERAGE	IMPORTED WATER RANGE	MAJOR SOURCES OF CONTAMINATION IN DRINKING WATER
PRIMARY STANDARDS- Mandatory Health Related Standards Established by the State of California, Department of Health Services												
CLARITY												
Turbidity	NTU	0.5 (TT)	NA	0.078	0.05-0.14	0.009	0.067-0.217	NA	NA	NA	NA	Soil runoff
	%	95 (a)	NA	% < 0.5: 100%		% < 0.5: 100%		NA	NA	NA	NA	
INORGANIC CHEMICALS												
Aluminum	ppm	1	0.6	0.110	0.067 - 0.165	NC	NC	<0.05	<0.05	<0.05	<0.05 - <0.05	Residue from treatment processes
Arsenic	ppb	50	NA	NC	NC	NC	NC	3.6	3.6	2.4	2.1 - 2.8	Erosion of natural deposits
Fluoride	ppm	2	1	NC	NC	NC	NC	0.4	0.4	0.25	0.21 - 0.28	Erosion of natural deposits
Nitrate (as Nitrogen)	ppm	10	10	NC	NC	0.037	0.28 - 0.48	<0.20	<0.20 - <0.20	ND	ND	Runoff & leaching from fertilizer use
RADIOACTIVITY												
Gross Alpha	pCi/l	15	[0]	NC	NC	NC	NC	3.5	3.5	4.05	<1.0 - 6.22	Erosion of natural deposits
Gross Beta	pCi/l	50	[0]	NC	NC	NC	NC	5.8	5.8	5.52	4.18 - 7.42	Decay of natural deposits
Gross Radium (Radium 226 & Radium 228)	pCi/l	5	[0]	NC	NC	NC	NC	0.5	0.5	0.60	<0.5 - 1.25	Erosion of natural deposits
Strontium-90	pCi/l	8	NA	NC	NC	NC	NC	0.0	0.0	ND	ND	Decay of natural deposits
Tritium	pCi/l	20,000	NA	NC	NC	NC	NC	120	120	ND	ND	Decay of natural deposits
Uranium	pCi/l	20	[0]	NC	NC	NC	NC	3.3	3.3	2.55	<2.0 - 3.67	Erosion of natural deposits
MICROBIOLOGICAL												
Total Coliform Bacteria	(b)	5.0%	[0]	0%	0%	0%	0%	NA	NA	NA	NA	Naturally present in environment
Fecal Coliform and *E. coli*	(b)	(b)	[0]	0%	0%	0%	0%	NA	NA	NA	NA	Human and animal fecal waste
ORGANIC CHEMICALS												
Total Trihalomethanes (THMs)	ppb	80	NA	NC	NC	64.6	57.0-79.0	NC	NC	NC	NC	By-product of water chlorination
Haloacetic acids (HAA's)	ppb	NS	NA	NC	NC	24.4	19.7-28.6	NC	NC	NC	NC	Disinfection by-product
SECONDARY STANDARDS- Aesthetic Standards Established by the State of California, Department of Health Services												
Aluminum	ppb	200	600	NC	NC	NC	NC	<50	<50	<50	<50 - <50	Residue from treatment processes
Chloride	ppm	500	NA	NC	NC	NC	NC	85.3	85.3	75	71 - 85	Runoff / leacheng of natural deposits
Color	units	15	NA	NC	NC	NC	NC	11	11	5	3 - 7	Naturally occurring organic materials
Specific Conductance	umho/cm	1600	NA	NC	NC	NC	NC	969	969	836	814 - 888	Substances that form ions in water
Sulfate	ppm	500	NA	NC	NC	NC	NC	187	187	179	167 - 189	Runoff / leaching of natural deposits
Total Dissolved Solids	ppm	1000	NA	NC	NC	NC	NC	524	524	500	485 - 531	Runoff / leaching of natural deposits
Turbidity	NTU	5 (TT)	NA	0.078	0.05-0.14	0.009	0.067-0.217	0.70	0.70	1.1	0.66 - 2.1	Soil runoff
UNREGULATED CONTAMINANTS - May become regulated in the future												
Boron	ppb	NA	AL=1000	NC	NC	NC	NC	174	174	130	120 - 140	Erosion of natural deposits
Perchlorate	ppb	NA	AL=4	NC	NC	NC	NC	<4	<4	<4	<4 - 5	By-product of industrial processes
Vanadium	ppb	NA	AL=50	NC	NC	NC	NC	4.4	4.4	3	3	Erosion of natural deposits
OTHER PARAMETERS												
Calcium	ppm	NA	NA	NC	NC	NC	NC	55.0	55.0	57	53 - 59	Runoff / leaching of natural deposits
Chlorine Residual as Chloramine	ppm	4.0	4.0	NA	NA	2.4	2.1-3.0	NA	NA	NA	NA	Disinfectant
Hardness as calcium carbonate	ppm	NA	NA	NC	NC	NC	NC	243	243	241	229 - 252	Leaching from natural deposits
Magnesium	ppm	NA	NA	NC	NC	NC	NC	23.9	23.9	24	23.0 - 25.5	Runoff / leaching of natural deposits
Sodium	ppm	NA	NA	NC	NC	NC	NC	80.8	80.8	77	73 - 82	Runoff / leaching of natural deposits
LEAD AND COPPER RULE												
Copper	ppm	AL=1.3	1.3	(90th percentile = 0.065)		0.046	<0.001 - 0.582	0 out of 30 above AL (no violations)				Corrosion of household
Lead	ppb	AL=15	2	(90th percentile = 1)		1.3	<1 - 33	1 out of 30 above AL (no violations)				plumbing systems

ABBREVIATIONS:

AL = Action Level
NA = Not Applicable
NC = Not Collected
ND = None Detected
NS = No Standard
NTU = Nephelometric Turbidity Units
pCi/l = pico Curies per liter
ppm = parts per million (mg/l)
ppb = parts per billion (ug/l)
TT = Treatment Technique

DEFINITIONS and NOTES:

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.

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.

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

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 which a water system must follow.

(a) TURBIDITY: A measure of the cloudiness of water; indicates effectiveness of the filtration system. Must be less than 0.5 NTU in 95% of monthly readings, and always less than 5.0 NTU.

(b) MICROBIOLOGICAL: Total must be less than 5% monthly positive results. Two consecutive positives, one being E-coli, is a violation. No MCL violations in 2002 occurred.

ADDITIONAL PUBLIC INFORMATION

In accordance with the mandate of the Safe Drinking Water Act (SDWA), the Californi Department of Health Services (DHS) has developed the Drinking Water Sour Assessment and Protection (DWSAP) Program to evaluate watershed vulnerabil to potential contamination sources. The City of Poway has completed th assessment, and results and documentation are available for public review at t Lester J. Berglund Water Treatment Plant and the DHS District Offic (see phone number below)

Metropolitan Water District (MWD) SOURCE WATER ASSESSMENT:

In December 2002, MWD OF Southern California completed its source wat assessment of its Colorado River and State Water Project supplies. Colorado Riv supplies are considered to be most vulnerable to urban / storm water runoff, increasi urbanization in the watershed, and wastewater. State Water Project supplies a considered to be most vulnerable to urban / storm water runoff, wildlife, agricultu recreation, and wastewater. A copy of the assessment can be obtained by contacti Metropolitan by phone at (213) 217 - 685(

UNREPORTED WATER QUALITY PARAMETERS:

Only "detected" parameters are included in this report, as required by the Sta Over 75 additional water quality parameters were investigated, and not detec at the detection limits required by the State of Californi

LEAD AND COPPER RULE

Mandated by the EPA effective in 1992, the Rule monitors for lead and copp contamination after the water has left the distribution system. Water is collected fro selected representative household faucets every three years. The most rec sampling was in July, 2001, and the next sampling is due in July, 200

METHYL-tert-BUTYL-ETHER (MTBE):

Not detected in Poway water supply. MTBE has been found in some groundwa wells in California. The source is most likely from leaking underground gasoli storage tanks. Poway relies on surface water sources which are less vulnerat to MTBE contamination

WATER CONSERVATION TIPS:

- Fix leaking faucets, hoses, pipes, toilets, sprinklers, et
- Wash full loads only of laundry and dishes
- Install water-saving devices in faucets, toilets, showers,and appliance
- Water the lawn, garden, and agriculture in the early morning or evenir
- Use mulch around plants, shrubs, and trees

OPPORTUNITY FOR PUBLIC PARTICIPATION

The City Council meets each Tuesday at 7:00 P.M. in the Council Chambers at C Hall, located at 13325 Civic Center Drive

INFORMATIVE WEB SITES:

Environmental Protection Agency (EPA) Office of Water : www.epa.gov/safewat State of California, Department of Health Services (DHS) : www.dhs.ca.gov/ps/ddwer

IMPORTANT PHONE NUMBERS:

City of Poway Water Treatment Plant…… (858) 679-5451
EPA Safe Drinking Water Hotline…… (800) 426-4791
California DHS, Office of Drinking Water…… (916) 323-6111

ESPANOL: *Este informe contiene información muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.*

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