

# 2013 Consumer Confidence Report

Water System Name: MWD of So. California – Iron Mountain Pumping Plant Report Date: May 30, 2014

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, 2013 and may include earlier monitoring data. **All primary drinking water standards were met during this period.**

**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: River  
Name & location of source(s): Colorado River at Lake Havasu, Whitsett Intake Pumping Plant  
Drinking Water Source Assessment information: Metropolitan completed a Source Water Assessment of its Colorado River supplies upstream of the Whitsett Intake Pumping Plant in December 2002 and submitted an updated Colorado River watershed Sanitary Survey in March 2012. This source is considered to be most vulnerable to treated wastewater discharges, urbanization in the watershed, and recreation, which may contribute sources of nutrients, pathogens, metals, and other chemicals of concern. If you would like more information about these reports, please call (213) 217-6850.  
Time and place of regularly scheduled board meetings for public participation: 11:30 A.M., 2<sup>nd</sup> Tuesday of every month, 700 N. Alameda St., Los Angeles, California 90012  
For more information, contact: Sun Liang, Ph.D., P.E. Phone: (909) 392-5273

## **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.

**Notification Level (NL):** The level at which notification of the water system's governing body is required.

**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 which a water system must follow.

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

**CFU:** colony-forming units

**DLR:** State's detection limit for purposes of reporting

**ND:** not detected at testing limit or reporting level

**NA:** not applicable

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

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

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

**RAA:** Running annual average; *highest RAA* is the highest of all RAA calculated as average of all the samples collected within a 12-month period; the calculated RAA for the first three quarters (quarters 1–3) are based on results from the previous quarters of the past calendar year

**TON:** threshold odor number

**µS/cm:** microSiemen per centimeter

**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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which 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*, which 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, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, motorized water-craft, urban storm water runoff, agricultural applications, and septic systems.
- *Radioactive contaminants*, which 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 California Department of Public Health (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 through 8 show results for constituents detected during the current reporting period.** 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 significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

**TABLE 1A – DISTRIBUTION SYSTEM SAMPLING RESULTS FOR COLIFORM BACTERIA**

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0 (In a month)	0	No more than 1 positive monthly sample	0	Naturally present in the environment
<i>E. coli</i>	0 (In the year)	0	<u>Acute Violation</u> : A routine sample and a repeat sample are total coliform positive, and one of these is also <i>E. coli</i> positive	0	Human and animal fecal waste

**TABLE 1B – SOURCE WATER SUPPLY SHOWING THE DETECTION OF COLIFORM BACTERIA <sup>(1)</sup>**

Microbiological Contaminants	Sample Date	Range Average	Results	Trigger Level <sup>(2)</sup> (MCL)	Typical Source of Bacteria
Total Coliform Bacteria (CFU/100 ml)	1/13–12/13 (Weekly)	Range	ND–6,200	NA	Naturally present in the environment
		Median	66		
<i>E. coli</i> (CFU/100 ml)	1/13–12/13 (Weekly)	Range	ND–1	100 (None)	Human and animal fecal waste
		Median	ND		

(1) Samples were taken from the Colorado River Aqueduct discharge radial gate at Iron Mountain. Reporting level is 1 CFU/100 ml for total coliform and *E. coli*.

(2) If the *E. coli* levels exceed 100 CFU/100 ml as a weekly median, additional treatment or operational controls will be provided per the MWD action plan.

**TABLE 2 – DISTRIBUTION SYSTEM MONITORING RESULTS FOR LEAD AND COPPER** <sup>(3)</sup>

Lead and Copper (and reporting units)	Sample Date	No. of Samples Collected	Results 90 <sup>th</sup> Percentile	No. Sites Exceeding AL	AL	PHG	Typical Source
Lead (ppb)	July 2011	7	3	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) <sup>(4)</sup>	July 2011	7	0.35	0	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SOURCE WATER MONITORING RESULTS FOR SODIUM AND HARDNESS** <sup>(5)</sup>

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	MCL	PHG (MCLG)	Typical Source
Sodium (ppm)	April 2013; October 2013	Range	81–82	None	None	Generally found in ground and surface water
		Average	82			
Hardness (ppm)	April 2013; October 2013	Range	280	None	None	Generally found in ground and surface water
		Average	280			

**TABLE 4 – SOURCE WATER MONITORING RESULTS FOR CONSTITUENTS WITH A PRIMARY DRINKING WATER STANDARD** <sup>(5)</sup>

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	MCL	PHG (MCLG)	Typical Source
Arsenic (ppb)	April 2013	Range	2.5	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
		Average	2.5			
Barium (ppb)	April 2013	Range	110	1,000	2,000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
		Average	110			
Fluoride (ppm) (naturally-occurring)	April 2013; October 2013	Range	0.3	2.0	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories
		Average	0.3			
Perchlorate (ppb) <sup>(6)</sup>	April 2013	Range	ND	6	6	Industrial waste discharge
		Average	ND			
Gross Alpha Particle Activity (pCi/L) <sup>(7)</sup>	2011 (Quarterly)	Range	3–6	15	(0)	Erosion of natural deposits
		Average	4			
Gross Beta Particle Activity (pCi/L) <sup>(7,8)</sup>	2011 (Quarterly)	Range	ND–5	50	(0)	Decay of natural and man-made deposits
		Average	ND			
Uranium (pCi/L) <sup>(7)</sup>	2011 (Quarterly)	Range	2–3	20	0.43	Erosion of natural deposits
		Average	2			

(3) Data are from samples collected (triennially) during the July 2011 monitoring and reported for three years until the next samples are collected.

(4) The 90<sup>th</sup> percentile for copper was above the public health goal (PHG), but below the regulatory action level (AL); this result is in compliance with the federal and state lead and copper rule.

(5) Samples were taken from the Colorado River at Lake Havasu, Whittsett Intake Pumping Plant.

(6) Lake Havasu had a perchlorate level of 1.1 ppb based on Metropolitan's reporting level of 0.1 ppb, which is below the State DLR of 4 ppb.

(7) Data are from samples collected (triennially) during four consecutive quarters of monitoring in 2011 and reported for three years until the next samples are collected.

(8) The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.

**TABLE 5 – DISTRIBUTION SYSTEM MONITORING RESULTS FOR DISINFECTION BYPRODUCTS AND DISINFECTANT RESIDUALS**

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	MCL <sup>(9)</sup> [MRDL]	PHG [MRDLG]	Typical Source
Total Trihalomethanes (TTHM) (ppb)	1/13–12/13	Range	2.3–27	80	None	Byproduct of drinking water chlorination
		Highest RAA	19			
Haloacetic Acids (Five) (HAA5) (ppb)	1/13–12/13	Range	ND–3.5	60	None	Byproduct of drinking water chlorination
		Highest RAA	3.7			
Chlorine (Free) Residual (ppm)	1/13–12/13	Range	0.42–1.2	[4.0]	[4.0]	Drinking water disinfectant added for treatment
		Highest RAA	0.88			

**TABLE 6A – DISTRIBUTION SYSTEM MONITORING RESULTS FOR CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	MCL	PHG (MCLG)	Typical Source
Odor Threshold (TON)	September 2013	Range	2	3	NA	Soil runoff
		Average	2			
Turbidity (NTU) <sup>(10)</sup>	1/13–12/13	Range	ND–0.42	5	NA	Soil runoff
		Average	ND			

**TABLE 6B – SOURCE WATER MONITORING RESULTS FOR CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD <sup>(5)</sup>**

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	MCL	PHG (MCLG)	Typical Source
Chloride (ppm)	April 2013; October 2013	Range	78	500	NA	Runoff/leaching from natural deposits
		Average	78			
Color (units)	April 2013; October 2013	Range	4–5	15	NA	Naturally-occurring organic materials
		Average	5			
Specific Conductance ( $\mu$ S/cm)	April 2013; October 2013	Range	880–940	1,600	NA	Substances that form ions in water; seawater influence
		Average	910			
Sulfate (ppm)	April 2013; October 2013	Range	220	500	NA	Runoff/leaching from natural deposits; industrial waste
		Average	220			
Total Dissolved Solids (ppm)	April 2013; October 2013	Range	570–580	1,000	NA	Runoff/leaching from natural deposits
		Average	580			

**TABLE 7 – MONITORING RESULTS FOR UNREGULATED CONSTITUENTS**

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	NL or [PHG]	Health Effects Language
Boron (ppb) <sup>(5)</sup>	April 2013	Range	110	1,000	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.
		Average	110		
Chlorate (ppb) (Domestic Tank Effluent)	August 2013	Range	120	800	Byproduct of drinking water chlorination; industrial processes
		Average	120		
Chromium VI (ppb) <sup>(5, 11)</sup>	April 2013	Range	ND	[0.02]	Naturally-occurring; industrial processes
		Average	ND		

(5) Samples were taken from the Colorado River at Lake Havasu, Whitsett Intake Pumping Plant.

(9) Compliance was based on a running annual average. Metropolitan was in compliance with all provisions of the Stage 1 Disinfectants and Disinfection Byproducts Rule.

(10) The turbidity levels for grab samples at this location were in compliance with the Secondary Standard. Per 2013 Consumer Confidence Report Guidance, the state DLR for turbidity is 0.1 NTU.

(11) Lake Havasu had a chromium VI level of 0.04 ppb based on Metropolitan's reporting level of 0.03 ppb, which is below the State DLR of 1 ppb.

### 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).

### Additional Special Language for Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The **Iron Mountain Pumping Plant** is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

<b>Treatment Technique</b> <sup>(12)</sup> (Type of approved filtration technology used)	Microfiltration
<b>Turbidity Performance Standards</b> <sup>(13)</sup> (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 - Be less than or equal to <u>0.1</u> NTU in 95% of measurements in a month. 2 - Not exceed <u>1.0</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100
Highest single turbidity measurement during the year	0.12 NTU
The number of violations of any surface water treatment requirements	0

(12) A required process intended to reduce the level of a contaminant in drinking water

(13) 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 which meet performance standards are considered to be in compliance with filtration requirements.

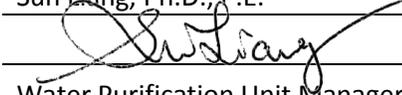
## Consumer Confidence Report Certification Form

(To be submitted with a copy of the CCR)

Water System Name: Metropolitan Water District of Southern California – Iron Mountain Pumping Plant

Water System Number: 36-00382

The water system named above hereby certifies that its Consumer Confidence Report was distributed on May 30, 2014 to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the California Department of Public Health.

Certified by: Name: Sun Liang, Ph.D., P.E.  
 Signature:   
 Title: Water Purification Unit Manager  
 Phone Number: (909) 392-5273 Date: May 30, 2014

To summarize report delivery used and good-faith efforts taken, please complete this page by checking all items that apply and fill-in where appropriate:

- CCR was distributed by mail or other direct delivery methods (attach description of other direct delivery methods used).
- CCR was distributed using electronic delivery methods described in the Guidance for Electronic Delivery of the Consumer Confidence Report (water systems utilizing electronic delivery methods must complete the second page). E-mail
- “Good faith” efforts were used to reach non-bill paying consumers. Those efforts included the following methods:
- Posting the CCR at the following URL: www.\_\_\_\_\_
  - Mailing the CCR to postal patrons within the service area (attach zip codes used)
  - Advertising the availability of the CCR in news media (attach copy of press release)
  - Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
  - Posted the CCR in public places (Iron Mountain Pumping Plant bulletin board)
  - Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
  - Delivery to community organizations (attach a list of organizations)
  - Publication of the CCR in the electronic city newsletter or electronic community newsletter or listserv (attach a copy of the article or notice)
  - Electronic announcement of CCR availability via social media outlets (attach list of social media outlets utilized)
  - Other (attach a list of other methods used)
- For systems serving at least 100,000 persons:* Posted CCR on a publicly-accessible internet site at the following URL: www.\_\_\_\_\_
- For privately-owned utilities:* Delivered the CCR to the California Public Utilities Commission

