2014 Consumer Confidence Report

Water System Name: **Metropolitan Water District of Southern California Iron Mountain Pumping Plant** Report Date: **June 2, 2015**

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, 2014, 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.*

Time and place of regularly scheduled board meetings for public participation: *11:30 AM, 2nd 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.

Variances and Exemptions: State Board 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

LRAA: Locational Running Annual Average

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 State Water Resources Control Board (State Board), Division of Drinking Water, formerly the Drinking Water Program of the California Department of Public Health, prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board 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 State Board 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
E. coli	0 *(In the year)*	0	Acute Violation: A routine sample and a repeat sample are total coliform positive, and one of these is also *E. coli* positive	0	Human and animal fecal waste

TABLE 1B – SOURCE WATER SUPPLY SHOWING THE DETECTION OF COLIFORM BACTERIA (1)

Microbiological Contaminants	Sample Date	Range Average	Results	Trigger Level (2) (MCL)	Typical Source of Bacteria
Total Coliform Bacteria (CFU/100 ml)	1/14–12/14 (Weekly)	*Range*	ND–5,700	NA	Naturally present in the environment
		Median	36		
E. coli (CFU/100 ml)	1/14–12/14 (Weekly)	*Range*	ND	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 (3)

Lead and Copper (and reporting units)	**Sample Date**	**No. of Samples Collected**	**Results 90th Percentile**	**No. Sites Exceeding AL**	**AL**	**PHG**	**Typical Source**
Lead (ppb)	July 2014; August 2014	7	2	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	July 2014; August 2014	7	0.731	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 (4)

Chemical or Constituent (and reporting units)	**Sample Date**	**Range Average**	**Results**	**MCL**	**PHG (MCLG)**	**Typical Source**
Sodium (ppm)	April 2014; October 2014	*Range*	83–90	None	None	Generally found in ground and surface water
		Average	86			
Hardness (ppm)	April 2014; October 2014	*Range*	289–292	None	None	Generally found in ground and surface water
		Average	291			

TABLE 4 – SOURCE WATER MONITORING RESULTS FOR CONSTITUENTS WITH A PRIMARY DRINKING WATER STANDARD (4)

Chemical or Constituent (and reporting units)	**Sample Date**	**Range Average**	**Results**	**MCL**	**PHG (MCLG)**	**Typical Source**
Arsenic (ppb)	April 2014	*Range*	2.5	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
		Average	2.5			
Barium (ppb)	April 2014	*Range*	114	1,000	2,000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
		Average	114			
Chromium VI (ppb) (5)	April 2014	*Range*	ND	10	0.02	Naturally-occurring; industrial processes
		Average	ND			
Fluoride (ppm) (naturally-occurring)	April 2014; October 2014	*Range*	0.3	2.0	1	Erosion of natural deposits; discharge from fertilizer and aluminum factories
		Average	0.3			
Perchlorate (ppb) (6)	April 2014	*Range*	ND	6	6	Industrial waste discharge
		Average	ND			
Gross Alpha Particle Activity (pCi/L)	2014 (Quarterly)	*Range*	ND – 3.1	15	(0)	Erosion of natural deposits
		Average	ND			
Gross Beta Particle Activity (pCi/L) (7)	2014 (Quarterly)	*Range*	4.4 – 6.3	50	(0)	Decay of natural and man-made deposits
		Average	5.5			
Uranium (pCi/L)	2014 (Quarterly)	*Range*	2.3 – 3.7	20	0.43	Erosion of natural deposits
		Average	2.5			

(3) The 90th percentile for lead and copper was above the PHG, but are in compliance with the federal and state lead and copper rule. The lead level at one of the homes was above the lead action level. This is not a regulatory exceedance since compliance is based on the 90th percentile lead value for the entire distribution system, which was 2 ppb.

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

(5) Metropolitan's chromium VI reporting level is 0.03 ppb, which is below the State DLR of 1 ppb. Result above Metropolitan's reporting level and below the DLR are reported as ND in this report. Chromium VI monitoring data are available upon request.

(6) Metropolitan's perchlorate reporting level is 0.1 ppb for Lake Havasu, which is below the State DLR of 4 ppb. Result above Metropolitan's reporting level and below the DLR are reported as ND in this report. Perchlorate monitoring data are available upon request.

(7) 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 [8] [MRDL]	PHG [MRDLG]	Typical Source
Total Trihalomethanes (TTHM) (ppb)	1/14–12/14 (Quarterly)	*Range*	20–55	80	None	Byproduct of drinking water chlorination
		Highest LRAA	44			
Haloacetic Acids (Five) (HAA5) (ppb)	1/14–12/14 (Quarterly)	*Range*	3.1–7.4	60	None	Byproduct of drinking water chlorination
		Highest LRAA	4.9			
Chlorine (Free) Residual (ppm)	1/14–12/14 (Quarterly)	*Range*	0.09–1.6	[4.0]	[4.0]	Drinking water disinfectant added for treatment
		Highest RAA	0.80			

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
Turbidity (NTU) [9]	1/14–12/14	*Range*	ND–0.13	5	NA	Soil runoff
		Average	ND			

TABLE 6B – SOURCE WATER MONITORING RESULTS FOR CONSTITUENTS WITH A SECONDARY DRINKING WATER STANDARD [4]

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	MCL	PHG (MCLG)	Typical Source
Chloride (ppm)	April 2014; October 2014	*Range*	78–85	500	NA	Runoff/leaching from natural deposits
		Average	82			
Color (units)	April 2014; October 2014	*Range*	4–5	15	NA	Naturally-occurring organic materials
		Average	4			
Specific Conductance (µS/cm)	April 2014; October 2014	*Range*	924–964	1,600	NA	Substances that form ions in water; seawater influence
		Average	944			
Sulfate (ppm)	April 2014; October 2014	*Range*	219–229	500	NA	Runoff/leaching from natural deposits; industrial waste
		Average	224			
Total Dissolved Solids (ppm)	April 2014; October 2014	*Range*	593–607	1,000	NA	Runoff/leaching from natural deposits
		Average	600			

TABLE 7 – MONITORING RESULTS FOR UNREGULATED CONSTITUENTS

Chemical or Constituent (and reporting units)	Sample Date	Range Average	Results	NL	Health Effects Language
Boron (ppb) [4]	April 2014	*Range*	100	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	100		
Chlorate (ppb) *(Domestic Tank Effluent)*	August 2014	*Range*	104	800	Byproduct of drinking water chlorination; industrial processes
		Average	104		

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

(8) Compliance was based on the highest LRAA for TTHM and HAA5, and RAA for free chlorine residual. Metropolitan was in compliance with all provisions of the Stage 2 Disinfectants and Disinfection Byproducts Rule.

(9) The turbidity levels for grab samples at this location were in compliance with the Secondary Standard. Turbidity results below the State DLR of 0.1 NTU are reported as ND 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).

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

Treatment Technique (10) (Type of approved filtration technology used)	Microfiltration
Turbidity Performance Standards (11) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1. Be less than or equal to **0.1 NTU** in 95% of measurements in a month. 2. Not exceed ___ NTU for more than eight consecutive hours. **NA** 3. 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	0.08 NTU
The number of violations of any surface water treatment requirements	0

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

(11) 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 meeting 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)

(to certify electronic delivery of the CCR, use the certification form on the State Board's website at http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml

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

Water System Number: 3600382

The water system named above hereby certifies that its Consumer Confidence Report was distributed on June 2, 2015, 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 State Water Resources Control Board, Division of Drinking Water.

Certified by: Name: Sun Liang, Ph.D., P.E.

Signature: Sun Liang

Title: Water Purification Unit Manager

Phone Number: (909) 392-5273 Date: June 2, 2015

To summarize report delivery used and good-faith efforts are 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). **Water Quality electronically submitted the CCR as an email attachment.**

☒ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☐ Posting the CCR on the Internet at 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)
- ☐ 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

This form is provided as a convenience and may be used to meet the certification requirement of section 64483(c), California Code of Regulations.