

2012 Consumer Confidence Report

Water System Name: Victor Valley Wastewater Reclamation Authority Report Date: June 25, 2013

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, 2012 and may include earlier monitoring data.

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: Groundwater

Name & location of source(s): Victor Valley Wastewater Reclamation Authority – wastewater treatment plant located at 20111 Shay Road, Victorville, CA 92394

Drinking Water Source Assessment information: _____

Time and place of regularly scheduled board meetings for public participation: Third Thursday of each month

Board meetings are held at: 15776 Main Street Suite 3, Hesperia, CA 92345

For more information, contact: Logan Olds, General Manager Phone: (760) 948-9849

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 highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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 that a water system must follow.

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

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter ($\mu\text{g/L}$)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

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

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, that 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, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. 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 frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	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 <i>E. coli</i>	(0)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2	< 5 ppb	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2	< 0.05 ppm	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12/18/13	86 ppm	85 – 86 ppm	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12/18/13	150 ppm	140 – 150 ppm	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

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 [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Turbidity	12/18/12	1.3 NTU	0.3 - 1.3 NTU	TT	N/A	Soil runoff
Heterotrophic Plate Count	09/18/12	160	ND - 160	TT	HPC = N/A	Naturally present in the environment
Gross Alpha Particle Activity	12/18/12	1.11 pCi/L	1.02 – 1.11 pCi/L	15 pCi/L	(0)	Erosion of natural deposits
Arsenic	12/18/12	3.2 ppb	2.4 – 3.2 ppb	10 ppb	0.004 ppb	Erosion of natural deposits,; runoff from orchards; glass and electronics production wastes.
Fluoride (ppm)	12/18/12	0.8 ppm	0.7 – 0.8 ppm	2.0 ppm	1.0 ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm as nitrate, NO ₃)	12/18/12	31 ppm	25 – 31 ppm	45 ppm	45 ppm	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Control of DBP Precursors (TOC) (ppm)	12/18/12	0.48 ppm	0.32 – 0.48 ppm	TT	N/A	Various natural and man-made sources.
TTHMs – Total Trihalomethanes (ppb)	12/18/12	2.8 ppb	1.6 – 2.8 ppb	80 ppb	NA	By-product of drinking water disinfection.
Haloacetic Acids (ppb)	12/18/12	4 ppb	ND – 4 ppb	60 ppb	NA	Byproduct 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
Color (Color Units)	12/18/12	15 Color Units	5 – 15 Color Units	15	NA	Naturally-occurring organic materials.
Foaming Agents (MBAS) (ppb)	12/18/12	90 ppb	ND – 90 ppb	500	NA	Municipal and industrial waste discharges.
Iron (ppb)	12/18/12	330 ppb	ND – 330 ppb	300	NA	Leaching from natural deposits; industrial wastes.
Manganese (ppb)	12/18/12	48 ppb	ND – 48 ppb	50	NA	Leaching from natural deposits.
Turbidity (NTU)	12/18/12	1.3 NTU	0.3 - 1.3 NTU	5	N/A	Soil runoff
Total Dissolved Solids (ppm)	12/18/12	430 ppm	410 – 430 ppm	1000	N/A	Runoff/leaching from natural deposits.
Specific Conductance (µS/cm)	12/18/12	700 µS/cm	680 – 700 µS/cm	1600	N/A	Substances that form ions when in water; seawater influence.
Chloride (ppm)	12/18/12	63 ppm	59 – 63 ppm	500	N/A	Runoff/leaching from natural deposits; seawater influence.
Sulfate (ppm)	12/18/12	40 ppm	39 – 40 ppm	500	N/A	Runoff/leaching from natural deposits; seawater influence.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Boron (ppm)	12/18/12	0.25 ppm	0.24 – 0.25 ppm	1.0 ppm	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.
Chromium IV (Hexavalent Chromium) (ppb)	12/18/12	0.075 ppb	0.071 – 0.075 ppb	n/a	n/a
Vanadium (ppb)	12/18/12	15 ppb	14 - 15 ppb	50 ppb	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later 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).

Lead-Specific Language for Community Water Systems: 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. [INSERT NAME OF UTILITY] 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>.

Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such 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. Nitrate level above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Iron (ppb)	Iron was found in Well # 1 at 330 ppb. Iron was not detected in Well # 2.	12/18/2012	Sampling for Iron in both wells will occur in July, 2013.	Iron was found at levels that exceed the secondary MCL of 300 ppb. The Iron MCL was set to protect against the unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high iron levels are due to leaching of natural deposits.

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year)		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		TT	n/a	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
VIOLATION OF GROUND WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique ^(a) (Type of approved filtration technology used)	
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

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

(b) 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.

* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language

Summary Information for Operating Under a Variance or Exemption
