2013 Consumer Confidence Report

Water System Name: **City of Westmorland Water Plant** Report Date: June 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. Last year, we conducted tests for over 80 contaminants. We detected a few of these contaminants at a level higher than the State allows. As we told you at the time, our water exceeded drinking water standards. For more information, see the paragraph marked ***Violation*** *on the bottom. This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.*

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: Surface Water-Canal

Name & general location of source(s): Trifolium South 5 Canal- South of City

Drinking Water Source Assessment information:

An assessment of the drinking water source(s) for City of Westmorland Water Plant was completed in February, 2003. A copy of the complete assessment is available at CDPH District Office, 1350 Front Street Room 2050, San Diego, CA 92101. You may request a summary of the assessment be sent to you by contacting CDPH district engineer Bill DiBiase at (619)-525-4013.

Time and place of regularly scheduled board meetings for public participation:

First and third Wednesday of each month at 6:00p.m. at Westmorland City Hall.

For more information, contact: **Ramiro Barajas, Public Works Supervisor** Phone: **(760) 344-9274)**

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

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.

Variances 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 (µg/L)

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

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.	**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, 8, and 9 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 LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	Aug. 2011	10	<5 ppb	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	Aug. 2011	10	0.062 ppm	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 2 – 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)	2013	110	NA	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2013	340	NA	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 3 – 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
Aluminum(ppm) RW	2013	.54	NA	1	.6	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic (ppb) RW	2013	2.1	NA	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)RW	2013	.12	NA	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Flouride (ppm)RW	2013	0.35	NA	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

TABLE 4 – 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
Aluminum(ppb) RW	2013	**540***	NA	200	NA	Erosion of natural deposits; residual from some surface water treatment processes
Color (unfiltered)	2013	**15.0***	NA	15	NA	Naturally-occurring organic materials
Iron (ppb)	2013	**440***	NA	300	NA	Leaching from natural deposits; industrial wastes
Odor (TON)	2013	1	NA	3	NA	Naturally-occurring organic materials
Sulfate (ppm)	2013	290	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes
Turbidity (ntu)	2013	**17.0***	NA	5	NA	Soil runoff
Chloride (ppm)	2013	120	NA	500	NA	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (umhos/cm)	2013	1100	NA	1600	NA	Substances that form ions when in water; seawater influence
Total Filterable Residue (TDS)(ppm)	2013	720	NA	1000	NA	Runoff/leaching from natural deposits

TABLE 5 – DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	VIOLATION	Typical Source of Contaminant
TTHM (ppb)	2013	**83.7***	47.0-100.0	0.080	YES	Byproduct of drinking water disinfection Sampled Quarterly
HAA5 (ppb)	2013	27.3	17.0-35.0	0.060	NO	Byproduct of drinking water disinfection Sampled Quarterly

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)	2013	.180	NA	1.0 ppm	NA
Vanadium(ppb)	2013	3.9	NA	50 ppb	NA

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Gross Alpha(pCi/L)	2013	14	NA	50	(0)	Decay of natural and man-made deposits
Uranium(pCi/L)	2013	3.4	NA	20	0.43	Erosion of natural deposits

TABLE 8 – DETECTION OF GENERAL CHEMICALS			
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**
Alkalinity (ppm)	2013	146	112-242
Bicarbonate (ppm)	2013	180	NA
Carbonate (ppm)	2013	5.3	NA
Calcium(ppm)	2013	87	NA
Potassium (ppm)	2013	4.9	NA
Magnesium (ppm)	2013	30	NA

**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: 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. Westmorland Water 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.

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**	**Aesthetic Effects**
TTHM Primary Standard	The Stage 1 annual running average for two consecutive quarters exceeded the drinking water standard of 80 ppb, and even though a (Stage 1) 4th quarter sample was taken, the (Stage 2) 4th quarter sampling was not performed. Triahalomethanes (TTHM) is a disinfection byproduct, which occurs when chlorine is used for disinfection and it reacts with naturally-occurring matter present in the water.	Stage 1 2013 2nd, 3rd Quarters; Stage 2 2013, 0 sample for 4th quarter	We are working with California Department of Public Health Office to evaluate the water supply and researching options to correct the problem. These options may include treating the water to reduce TTHM's or connecting to another water supply. We anticipate resolving the problem as soon as is feasibly possible to meet all required Public Health regulations.	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.	**None**
Aluminum secondary standard	Canals contained high levels of sediment. Most aluminum should have been filtered out during treatment.	1 raw water Sample in Oct. 2013	*Our System samples monthly the treated water to show that it is being removedbelow the secondary standard*	None	Aluminum levels over the secondary standard may cause colored water
Iron secondary standard	Canals contained high levels of sediment. *Our plant also adds an iron based coagulant as part of the treatment process.* Most iron particles should have been filtered out during treatment.	1 raw water sample in Oct.2013	*Our System samples monthly the treated water to show that it is being removed below the secondary standard*	None	Iron levels over the secondary standard may cause rusty color; sediment; metallic taste; reddish or orange staining
Color Secondary Standard	Canals contained naturally occurring organic materials and sediments causing high color in the water.	1 raw water sample in Oct. 2013	Our plant removes sediments and turbidity which meets Public Health regulations,	None	None
Turbidity Secondary Standard	Canals contained high levels of sediment.	1 Raw water sample in Oct. 2013	Our sedimentation basins and filters remove the turbidity.	None	None

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 9 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [a] (Type of approved filtration technology used)	Conventional filtration
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 _0.30_ NTU in 95% of measurements in a month. 2 – Not exceed _0.5_ NTU for more than eight consecutive hours. 3 – Not exceed _1_ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	99.3%
Highest single turbidity measurement during the year	0.23
Number of violations of any surface water treatment requirements	0

(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**
Failure to remove required amount of total organic carbon (TOC) [disinfection byproduct precursor (DBPP)]	We routinely monitor for the presence of drinking water contaminants. Water sample results taken on 3 monthly samples showed that the TOC reduction levels were not achieved.	3 monthly samples in 2013	We are working with California Department of Public Health Office to evaluate the water supply and researching options to correct the problem. These options may include treating the water to reduce TOC's or connecting to another water supply." We anticipate resolving the problem as soon as is feasibly possible to meet all required Public Health regulations.	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.