

2016 Consumer Confidence Report

Water System Name: Victor Valley Wastewater Reclamation Authority Report Date: April 12, 2017

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, 2016 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 & general 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: Our water comes from two wells drilled about 160 feet into an underground source of water. These wells are located not further than 50 feet north-west rear of the two story administration building at the wastewater treatment plant. Environmental Health Services of San Bernardino County completed our Source Water Assessment in December of 2002. Based on this assessment, our sources are considered most vulnerable to the following activities not associated with any detected contaminants: Lagoons/liquid wastes and sewer collection systems. A copy of the assessment may be obtained from VVWRA by phone at (760) 246-8638 or a copy of the complete assessment may be viewed at: Environmental Health Services, 385 N Arrowhead Ave., 2nd Floor, San Bernardino, CA 92415-0160.

Time and place of regularly scheduled board meetings for public participation: Third Thursday of each month
Board meetings are held at: 14343 Civic Dr. Victorville, CA 92392

For more information, contact: Logan Olds, General Manager Phone: (760) 246-8638

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

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: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

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

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.

ppb: parts per billion or micrograms per liter (µg/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 State Water Resources Control Board (State Board) 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 provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 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 State Board 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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 (state Total Coliform Rule)	(In a mo.)	(0)	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	(0)	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(from 4/1/16-12/31/16)	(0)	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .					

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)	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2016	2	ND (ppb)	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2016	2	ND (ppb)	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)	2016	94 (ppm)	92-96 (ppm)	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2016	135 (ppm)	130-140 (ppm)	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected Average	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Heterotrophic Plate Count bacteria (CFU/mL)	2016	4 (CFU/mL)	ND - 31 (CFU/mL)	TT	N/A	Naturally present in the environment
Gross Alpha Particle Activity (pCi/L)	2016	1.708 (pCi/L)	0.926-2.49 (pCi/L)	15 (pCi/L)	0.004 (pCi/L)	Erosion of natural deposits
Aluminum (ppm)	2016	ND (ppm)	<0.05-<0.05 (ppm)	1 (ppm)	0.6 (ppm)	Erosion of natural deposits; residue from some surface water treatment processes
Antimony (ppb)	2016	ND (ppb)	< 6.0 - < 6.0 (ppb)	6 (ppb)	20 (ppb)	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	2016	4.2 (ppb)	3.9-4.5 (ppb)	10 (ppb)	0.004 (ppb)	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Asbestos (MFL)	2016	ND (MFL)	<0.20-<2.0 (MFL)	7 (MFL)	7 (MFL)	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	2016	ND (ppm)	<0.100-<0.100 (ppm)	1 (ppm)	2 (ppm)	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	4 (ppb)	1 (ppb)	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries
Cadmium (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	5 (ppb)	0.04 (ppb)	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste

						batteries and paints
Chromium (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	50 (ppb)	(100) (ppb)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Copper (ppm)	2016	ND (ppm)	<0.050-<0.050 (ppm)	(1.3) (ppm)	0.3 (ppm)	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide (ppb)	2016	ND (ppb)	<100-<100 (ppb)	150 (ppb)	150 (ppb)	Discharge from steel/metal, plastic and fertilizer factories
Fluoride (ppm)	2016	0.65 (ppm)	0.6-0.7 (ppm)	2.0 (ppm)	1 (ppm)	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	10 (ppb)	0.02 (ppb)	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Lead (ppb)	2016	ND (ppb)	<5.0-<5.0 (ppb)	(AL=15) (ppb)	0.2 (ppb)	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Mercury (inorganic) (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	2 (ppb)	1.2 (ppb)	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel (ppb)	2016	ND (ppb)	<10.0-<10.0 (ppb)	100 (ppb)	12 (ppb)	Erosion of natural deposits; discharge from metal factories
Nitrate (as Nitrogen) (ppm)	2016	9.07 (as Nitrogen) (ppm)	8.3-9.5 (as Nitrogen) (ppm)	10 (as Nitrogen) (ppm)	10 (as Nitrogen) (ppm)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (as nitrogen, N) (ppm)	2016	ND (ppm)	<0.100-<0.100 (ppm)	1 (ppm)	1 (ppm)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (ppb)	2016	ND (ppb)	<4.0-<4.0 (ppb)	6 (ppb)	6 (ppb)	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.

Selenium (ppb)	2016	ND (ppb)	<5.0-<5.0 (ppb)	50 (ppb)	30 (ppb)	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Thallium (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	2 (ppb)	0.1 (ppb)	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
2,4-D (ppb)	2016	ND (ppb)	<10-<10 (ppb)	70 (ppb)	20 (ppb)	Runoff from herbicide used on row crops, range land, lawns, and aquatic weeds
2,4,5-TP (Silvex) (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	50 (ppb)	3 (ppb)	Residue of banned herbicide
Alachlor (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	2 (ppb)	4 (ppb)	Runoff from herbicide used on row crops
Atrazine (ppb)	2016	ND (ppb)	<0.5-ND (ppb)	1 (ppb)	0.15 (ppb)	Runoff from herbicide used on row crops and along railroad and highway right-of-ways
Bentazon (ppb)	2016	ND (ppb)	<2.0-<2.0 (ppb)	18 (ppb)	200 (ppb)	Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses
Benzo(a)pyrene (PAH) (ppt)	2016	ND (ppt)	<100-<100 (ppt)	200 (ppt)	7 (ppt)	Leaching from linings of water storage tanks and distribution mains
Carbofuran (ppb)	2016	ND (ppb)	<5.0-<5.0 (ppb)	18 (ppb)	1.7 (ppb)	Leaching of soil fumigant used on rice and alfalfa, and grape vineyards
Chlordane (ppt)	2016	ND (ppt)	<100-<100 (ppt)	100 (ppt)	30 (ppt)	Residue of banned insecticide
Dalapon (ppb)	2016	ND (ppb)	<10-<10 (ppb)	200 (ppb)	790 (ppb)	Runoff from herbicide used on rights-of-ways, and crops and landscape maintenance
Di(2-ethylhexyl) adipate (ppb)	2016	ND (ppb)	<5.0-<5.0 (ppb)	400 (ppb)	200 (ppb)	Discharge from chemical factories
Di(2-ethylhexyl) phthalate (ppb)	2016	ND (ppb)	<3.0-<3.0 (ppb)	4 (ppb)	12 (ppb)	Discharge from rubber and chemical factories; inert ingredient in pesticides
Dibromochloropropane (DBCP) (ppt)	2016	ND (ppt)	<10-<10 (ppt)	200 (ppt)	1.7 (ppt)	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Dinoseb (ppb)	2016	ND (ppb)	<2.0-<2.0 (ppb)	7 (ppb)	14 (ppb)	Runoff from herbicide used on soybeans, vegetables, and fruits
Dioxin (2,3,7,8-TCDD) (ppq)	2016	ND (ppq)	<5.0-<5.0 (ppq)	30 (ppq)	0.05 (ppq)	Emissions from waste incineration and other combustion; discharge from chemical factories

Diquat (ppb)	2016	ND (ppb)	<4.0-<4.0 (ppb)	20 (ppb)	15 (ppb)	Runoff from herbicide use for terrestrial and aquatic weeds
Endothall (ppb)	2016	ND (ppb)	<45-<45 (ppb)	100 (ppb)	94 (ppb)	Runoff from herbicide use for terrestrial and aquatic weeds; defoliant
Endrin (ppb)	2016	ND (ppb)	<0.10-<0.10 (ppb)	2 (ppb)	1.8 (ppb)	Residue of banned insecticide and rodenticide
Ethylene dibromide (EDB) (ppt)	2016	ND (ppt)	<10.0-<10.0 (ppt)	50 (ppt)	10 (ppt)	Discharge from petroleum refineries; underground gas tank leaks; banned nematocide that may still be present in soils due to runoff and leaching from grain and fruit crops
Glyphosate (ppb)	2016	ND (ppb)	<25.0-<25.0 (ppb)	700 (ppb)	900 (ppb)	Runoff from herbicide use
Heptachlor (ppt)	2016	ND (ppt)	<10.0-<10.0 (ppt)	10 (ppt)	8 (ppt)	Residue of banned insecticide
Heptachlor epoxide (ppt)	2016	ND (ppt)	<10.0-10.0 (ppt)	10 (ppt)	6 (ppt)	Breakdown of heptachlor
Hexachlorobenzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	1 (ppb)	0.03 (ppb)	Discharge from metal refineries and agricultural chemical factories; byproduct of chlorination reactions in wastewater
Hexachlorocyclopentadiene (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	50 (ppb)	2 (ppb)	Discharge from chemical factories
Lindane (ppt)	2016	ND (ppt)	<200-<200 (ppt)	200 (ppt)	32 (ppt)	Runoff/leaching from insecticide used on cattle, lumber, and gardens
Methoxychlor (ppb)	2016	ND (ppb)	<10.0-<10.0 (ppb)	30 (ppb)	0.09 (ppb)	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, and livestock
Molinate (Ordram) (ppb)	2016	ND (ppb)	<2.0-<2.0 (ppb)	20 (ppb)	1 (ppb)	Runoff/leaching from herbicide used on rice
Oxamyl (Vydate) (ppb)	2016	ND (ppb)	<20.0-<20.0 (ppb)	50 (ppb)	26 (ppb)	Runoff/leaching from insecticide used on field crops, fruits and ornamentals, especially apples, potatoes, and tomatoes
PCBs (Polychlorinated biphenyls) (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	500 (ppb)	90 (ppb)	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)	2016	ND (ppb)	<0.20-<0.20 (ppb)	1 (ppb)	0.3 (ppb)	Discharge from wood preserving factories, cotton and other insecticidal/herbicidal uses
Picloram (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	500 (ppb)	500 (ppb)	Herbicide runoff
Simazine (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	4 (ppb)	4 (ppb)	Herbicide runoff

Thiobencarb (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	70 (ppb)	70 (ppb)	Runoff/leaching from herbicide used on rice
Toxaphene (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	3 (ppb)	0.03 (ppb)	Runoff/leaching from insecticide used on cotton and cattle
Benzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	1 (ppb)	0.15 (ppb)	Discharge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppt)	2016	ND (ppt)	<500-<500 (ppt)	500 (ppt)	100 (ppt)	Discharge from chemical plants and other industrial activities
1,2-Dichlorobenzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	600 (ppb)	600 (ppb)	Discharge from industrial chemical factories
1,4-Dichlorobenzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	6 (ppb)	Discharge from industrial chemical factories
1,1-Dichloroethane (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	3 (ppb)	Extraction and degreasing solvent; used in the manufacture of pharmaceuticals, stone, clay, and glass products; fumigant
1,2-Dichloroethane (ppt)	2016	ND (ppt)	<0.50-<0.50 (ppb)	500 (ppt)	400 (ppt)	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	6 (ppb)	10 (ppb)	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	6 (ppb)	100 (ppb)	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
trans-1,2-Dichloroethylene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	10 (ppb)	60 (ppb)	Discharge from industrial chemical factories; minor biodegradation byproduct of TCE and PCE groundwater contamination
Dichloromethane (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	4 (ppb)	Discharge from pharmaceutical and chemical factories; insecticide
1,2-Dichloropropane (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	0.5 (ppb)	Discharge from industrial chemical factories; primary component of some fumigants
1,3-Dichloropropene (ppt)	2016	ND (ppt)	<500-<500 (ppt)	500 (ppt)	200 (ppt)	Runoff/leaching from nematocide used on croplands
Ethylbenzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	300 (ppb)	300 (ppb)	Discharge from petroleum refineries; industrial chemical factories
Methyl-tert-butyl ether (ppb)	2016	ND (ppb)	<3.0-<3.0 (ppb)	13 (ppb)	13 (ppb)	Leaking underground storage tanks; discharges from petroleum and chemical factories
Monochlorobenzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	70 (ppb)	70 (ppb)	Discharge from industrial and agricultural chemical factories and drycleaning facilities

Styrene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	100 (ppb)	0.5 (ppb)	Discharge from rubber and plastic factories; leaching from landfills
1,1,2,2-Tetrachloroethane (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	1 (ppb)	0.1 (ppb)	Discharge from industrial and agricultural chemical factories; solvent used in production of TCE, pesticides, varnish and lacquers
Tetrachloroethylene (PCE) (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	0.06 (ppb)	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
1,2,4-Trichlorobenzene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	5 (ppb)	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	200 (ppb)	1000 (ppb)	Discharge from metal degreasing sites and other factories; manufacture of food wrappings
1,1,2-Trichloroethane (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	0.3 (ppb)	Discharge from industrial chemical factories
Trichloroethylene (TCE) (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	5 (ppb)	1.7 (ppb)	Discharge from metal degreasing sites and other factories
Toluene (ppb)	2016	ND (ppb)	<0.50-<0.50 (ppb)	150 (ppb)	150 (ppb)	Discharge from petroleum and chemical factories; underground gas tank leaks
Trichlorofluoromethane (ppb)	2016	ND (ppb)	<5.0-<5.0-ND (ppb)	150 (ppb)	1300 (ppb)	Discharge from industrial factories; degreasing solvent; propellant and refrigerant
1,1,2-Trichloro-1,2,2-trifluoroethane (ppm)	2016	ND (ppm)	<0.010-ND (ppm)	1.2 (ppm)	4 (ppm)	Discharge from metal degreasing sites and other factories; drycleaning solvent; refrigerant
Vinyl chloride (ppt)	2016	ND (ppt)	<500-<500 (ppt)	500 (ppt)	50 (ppt)	Leaching from PVC piping; discharge from plastics factories; biodegradation byproduct of TCE and PCE groundwater contamination
Xylenes(ppm)	2016	ND (ppm)	<0.0005-<0.0005 (ppm)	1.750 (ppm)	1.8 (ppm)	Discharge from petroleum and chemical factories; fuel solvent
TTHMs (Total Trihalomethanes) (ppb)	2016	2.9 (ppb)	1.8-4.0 (ppb)	80 (ppb)	N/A	By-product of drinking water disinfection
Haloacetic Acids (ppb)	2016	ND (ppb)	<2.0-<2.0 (ppb)	60 (ppb)	N/A	By-product of drinking water disinfection
Bromate (ppb)	2016	ND (ppb)	<5.0-<5.0 (ppb)	10 (ppb)	0.1 (ppb)	Byproduct of drinking water disinfection
Chlorine (ppm)	2016	1.63 (ppm)	0.00-2.0 (ppm)	[MRDL = 4.0 (as CL2)] (ppm)	[MRDLG = 4.0 (as CL2)] (ppm)	Drinking water disinfectant added for treatment
Chlorite (ppm)	2016	ND (ppm)	<0.02-<0.02 (ppm)	1.0 (ppm)	0.05 (ppm)	Byproduct of drinking water disinfection
Control of DBP precursors (TOC) (ppm)	2016	0.645 (ppm)	0.63-0.66 (ppm)	TT	N/A	Various natural and man-made sources

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected Average	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2016	ND (ppb)	<50.0 (ppb)	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Color (Units)	2016	ND (Units)	<3.0-<3.0 (Units)	15 (Units)	N/A	Naturally-occurring organic materials
Copper (ppm)	2016	ND (ppm)	<0.050-<0.050 (ppm)	1.0 (ppm)	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Foaming Agents (MBAS) (ppb)	2016	ND (ppb)	<80.0-<80.0 (ppb)	500 (ppb)	N/A	Municipal and industrial waste discharges
Iron (ppb)	2016	ND (ppb)	<100 (ppb)	300 (ppb)	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2016	ND (ppb)	<20.0 (ppb)	50 (ppb)	N/A	Leaching from natural deposits
Methyl-tert-butyl ether (MTBE) (ppb)	2016	ND (ppb)	<3.0-<3.0 (ppb)	5 (ppb)	N/A	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor—Threshold (Units)	2016	ND (Units)	<1.0-<1.0 (Units)	3 (Units)	N/A	Naturally-occurring organic materials
Silver (ppb)	2016	ND (ppb)	<10.0-<10.0 (ppb)	100 (ppb)	N/A	Industrial discharges
Thiobencarb (ppb)	2016	ND (ppb)	<1.0-<1.0 (ppb)	1 (ppb)	N/A	Runoff/leaching from rice herbicide
Turbidity (Units)	2016	ND (Units)	<0.21-0.26 (Units)	5 (Units)	N/A	Soil runoff
Zinc (ppm)	2016	ND (ppm)	<0.050-<0.050 (ppm)	5 (ppm)	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	2016	400 (ppm)	390 – 410 (ppm)	1000 (ppm)	N/A	Runoff/leaching from natural deposits
Specific Conductance (uS/cm)	2016	710 (uS/cm)	700 – 720 (uS/cm)	1600 (uS/cm)	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	2016	71.5 (ppm)	70-73 (ppm)	500 (ppm)	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2016	40.5 (ppm)	39 – 42 (ppm)	500 (ppm)	N/A	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected Average	Range of Detections	Notification Level	Health Effects Language
Boron (ppm)	2016	0.255 (ppm)	0.250– 0.260 (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.

Chlorate (ppb)	2016	1700 (ppb)	1300– 2100 (ppb)	800 (ppb)	N/A
Vanadium (ppb)	2016	14.5 (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.

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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 (1-800-426-4701) or at <http://www.epa.gov/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

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.

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

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s). [INSERT NUMBER OF LEVEL 1 ASSESSMENTS] Level 1 assessment(s) were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions.

During the past year [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were required to be completed for our water system. [INSERT NUMBER OF LEVEL 2 ASSESSMENTS] Level 2 assessments were completed. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions.

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were required to complete a Level 2 assessment because we found *E. coli* in our water system. In addition, we were required to take [INSERT NUMBER OF CORRECTIVE ACTIONS] corrective actions and we completed [INSERT NUMBER OF CORRECTIVE ACTIONS] of these actions.
