AVILA BEACH
COMMUNITY SERVICES DISTRICT

Post Office Box 309, Avila Beach, CA 93424
Office and Meeting Room - 191 San Miguel Street, Avila Beach
Telephone (805) 595-2664 FAX (805) 595-7623
E-Mail Avilacsd@gmail.com

May 9, 2017

ANNUAL CONSUMER CONFIDENCE REPORT TO CUSTOMERS

Dear Customer:

California Drinking Water Regulations require that every water system annually report to their customers on the quality of water served during the previous year. The attached Consumer Confidence Report is intended to help Avila Beach Community Services District (District) customers become more informed on the quality of the District water and our compliance with the regulations.

The drinking water delivered by the District is purchased from two sources, the Lopez Water Supply Project, owned and operated by Zone 3 of the San Luis Obispo County and from the State Water Project. Both sources are delivered through the Lopez water delivery system.

All information in this report was obtained from analyses that were performed during 2016 from the Lopez Water Treatment Plant, the Polonio Pass Water Treatment Plant or the District distribution system. Treated State Water is blended with Lopez water in the County's distribution system originating at the Lopez Dam. In addition to routine testing performed by San Luis Obispo County (Lopez water) and the Central Coast Water Authority (State water) , the District also reports the results of monthly bacteriological testing for samples taken from the town's distribution system.

Water quality at various locations throughout the distribution system can vary from time to time. This is due to operational procedures, system limitations, chemical reactions and climatic changes. However, all drinking water delivered by the District meets all mandatory health-related standards established by the State of California Division of Drinking Water.

If you are a landlord or business owner, we encourage you to make this information available to your tenants and/or employees who may be interested in the quality of drinking water serving Avila Beach. If you have any questions concerning the attached water quality report, please call (805) 595-2664 or come by the District office at 191 San Miguel Street.

Sincerely,

Brad Hagemann, PE
General Manager

2016 Consumer Confidence Report

Water System Name: **Avila Beach Community Services District** Report Date: **April 20, 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: **Surface Water**

Name & general location of source(s): **Lopez Lake Water Supply Project and Central Coast Water Authority (CCWA) Polonio Pass Water Treatment Plant.**

Drinking Water Source Assessment information: **A source assessment was performed in 2001; Lopez Lake and Lopez Terminal Reservoir were found to be the most vulnerable to wastewater generation at the Lopez Recreation Area, livestock near the reservoirs, and a roadway that bisects the Terminal Reservoir. To date, these activities have not adversely impacted the WTP treated water quality. A copy of the assessment can be found at the San Luis Obispo County Public Works Department website or by contacting the Water Quality Laboratory at (805) 781-5111. Information on the State Water Project (CCWA) can be found at www.water.ca.gov/swp**

Time and place of regularly scheduled board meetings for public participation: **Regular meetings are held on the second Tuesday of each month at 7pm at the Avila Beach Community Center at 191 San Miguel Street.**

For more information, contact: **Avila Beach CSD** Phone: **(805) 595-2664**

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.

Variances 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)

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 *E. coli* (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 *E. coli* positive		Human and animal fecal waste
E. coli (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 *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

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**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	September 2016	N/A	N/A	N/A	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	September 2016	10	0.19	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**
CCWA – Polonio Pass Sodium (ppm)	2016	87	N/A	none	none	Salt present in the water and is generally naturally occurring
Lopez Lake WSP Sodium (ppm)	2016	73	N/A	none	none	Salt present in the water and is generally naturally occurring
CCWA – Polonio Pass Hardness (ppm)	2016	115	64 – 162	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Lopez Lake WSP Hardness (ppm)	2016	271	230 – 344	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**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Avila Beach CSD – San Miguel Street Total Trihalomethanes (ppb)	2016	55.8	32 – 72	80	N/A	Byproduct of drinking water disinfection
Avila Beach CSD – San Juan Park Total Trihalomethanes (ppb)	2016	56.1	30 – 88	80	N/A	Byproduct of drinking water disinfection
Lopez Lake WSP Total Trihalomethanes (ppb)	2016	36.9	20.8 – 36.9	80	N/A	Byproduct of drinking water disinfection
CCWA Polonio Pass Total Trihalomethanes (ppb)	2016	61.0	31 – 60	80	N/A	Byproduct of drinking water disinfection
Avila Beach CSD – San Miguel Street Haloacetic Acids (ppb)	2016	27.8	19 – 33	60	N/A	Byproduct of drinking water disinfection
Avila Beach CSD – San Juan Park Haloacetic Acids (ppb)	2016	27.0	19 – 32	60	N/A	Byproduct of drinking water disinfection
Lopez Lake WSP Haloacetic Acids (ppb)	2016	20.4	17.6 – 20.4	60	N/A	Byproduct of drinking water disinfection
CCWA Polonio Pass Haloacetic Acids (ppb)	2016	11.8	4.1 – 14	60	N/A	Byproduct of drinking water disinfection
Lopez Lake WSP Turbidity (NTU)	2016	0.038	0.028 – 0.252	TT=1	N/A	Soil runoff
CCWA Polonio Pass Turbidity (NTU)	2016	N/A	0.03 – 0.11	TT=1	N/A	Soil runoff
Lopez Lake WSP Aluminum (ppm)	2016	0.024	ND – 0.030	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
CCWA Polonio Pass Aluminum (ppm)	2016	0.110	ND – 0.25	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Lopez Lake WSP Arsenic (ppb)	2016	4.1	2.2 – 6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
CCWA Polonio Pass Arsenic (ppb)	2016	2.0	2.0	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Lopez Lake WSP Barium (ppm)	2016	0.033	N/A	2	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD, CONT'D						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Lopez Lake WSP Copper (ppm)	2016	0.029	N/A	AL – 1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
CCWA Polonio Pass Fluoride (ppm)	2016	0.12	0.12	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lopez Lake WSP Fluoride (ppm)	2016	0.228	N/A	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
CCWA Polonio Pass Nitrate as Nitrogen, N (ppm)	2016	0.43	0.43	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Lopez Lake WSP Gross Alpha Particle Activity (pCi/L)	2013	1.51	1.42 – 1.59	15	(0)	Erosion of natural deposits
CCWA Polonio Pass Gross Beta Particle Activity (pCi/L)	2016	5.7	5.7	50	(0)	Decay of natural and man-made deposits
Lopez Lake WSP Chlorine (ppm)	2016	2.32	1.76 – 2.92	[4.0 as Cl_2]	[4 as Cl_2]	Drinking water disinfectant added for treatment
Lopez Lake WSP Chlorite (ppm)	2016	0.74	0.462 – 1.0	1.0	0.05	Byproduct of drinking water disinfection
Lopez Lake WSP Chlorate (ppb)	2016	652	600 – 693	RAL = 800	N/A	Byproduct of drinking water disinfection
Lopez Lake WSP Chlorine Dioxide (ppb)	2016	88	20 – 340	[800 as ClO_2]	[800 as ClO_2]	Drinking water disinfectant added for treatment
CCWA Polonio Pass Total Chlorine Residual (ppm)	2016	2.3	1.9 – 2.7	[4.0 as Cl_2]	[4 as Cl_2]	Drinking water disinfectant added for treatment

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**
Lopez Lake WSP Aluminum (ppb)	2016	46	<20 – 72	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Lopez Lake WSP Chloride (ppm)	2016	76.4	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence
CCWA Polonio Pass Chloride (ppm)	2016	97	41 – 138	500	N/A	Runoff/leaching from natural deposits; seawater influence
Lopez Lake WSP Color (units)	2016	1	N/A	15	N/A	Naturally-occurring organic materials
CCWA Polonio Pass Color (units)	2016	ND (treated) 25 (source)	ND (treated) 25 (source)	15	N/A	Naturally-occurring organic materials
Lopez Lake WSP Copper (ppm)	2016	0.082	N/A	1	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD, CONT'D						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Lopez Lake WSP Odor (units)	2016	1.7	1.0 – 4.5	3	N/A	Naturally-occurring organic materials
CCWA Polonio Pass Odor (units)	2016	1.1	ND – 2	3	N/A	Naturally-occurring organic materials
Lopez Lake WSP Specific Conductance (µS/cm)	2016	779	N/A	1600	N/A	Substances that form ions when in water; seawater influence
CCWA Polonio Pass Specific Conductance (µS/cm)	2016	609	374 – 757	1600	N/A	Substances that form ions when in water; seawater influence
Lopez Lake WSP Sulfate (ppm)	2016	128	N/A	500	N/A	Runoff/leaching from natural deposits; industrial wastes
CCWA Polonio Pass Sulfate (ppm)	2016	100	100	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Lopez Lake WSP Turbidity (NTU)	2016	0.09	0.04 – 1.9	5	N/A	Soil runoff
CCWA Polonio Pass Turbidity (NTU)	2016	0.06	0.03 – 0.13	5	N/A	Soil runoff
Lopez Lake WSP Total Dissolved Solids (ppm)	2016	510	N/A	1000	N/A	Runoff/leaching from natural deposits
CCWA Polonio Pass Total Dissolved Solids (ppm)	2016	346	194 - 442	1000	N/A	Runoff/leaching from natural deposits
CCWA Polonio Pass Manganese (ppb)	2016	15	15	50	N/A	Leaching from natural deposits

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report. Compliance for Total Trihalomethanes and Haloacetic Acids is based on the Locational Running Annual Average of samples.*

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. Avila Beach Community Services District 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.

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Odor Threshold results were at levels that exceeded the secondary MCL (Maximum Contaminant Level) standards. The secondary MCLs were set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. Increases in odor have been associated with algae blooms. During times of increased algae blooms and odors, the algae is controlled with algaecides and the odor is reduced to acceptable levels by treating water with powder activated carbon.

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**
Chlorate	**The Lopez Project water system had chlorate levels in the distribution system above the notification level. Results showed levels as high as 0.86 ppm in the water distribution system; this is above the notification level of 0.8 ppm. The elevated levels were likely caused by degradation of sodium hypochlorite in the bulk storage tank, resulting in a lower solution strength and an increase chlorate levels in the solution.**	**November 29, 2016**	**Staff lowered the sodium hypochlorite tank level and has been taking more frequent deliveries of chlorine to keep the solution fresh. This enabled the plant to return to normal operation with low chlorate levels in the water produced.**	**Chlorate is considered noncancerous, but may contribute to pituitary or thyroid gland issues. This chemical may be given a maximum contaminant level at some time in the future once more information becomes available on the possible risk to human health.**