April 5, 2019

Sanitary Survey Report
For
Cayucos Beach Mutual Water Company –CA4010006
San Luis Obispo County

State Water Resources Control Board
Division of Drinking Water
Southern California Field Operations Branch
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I. INTRODUCTION

Purpose of Report

The purpose of this report is to document the findings of the recent Sanitary Survey conducted at Cayucos Beach Mutual Water Company (CBMWC). Sanitary Surveys are required every three years, at a minimum, and cover eight different elements: Source, Treatment, Distribution System, Finished Water Storage, Pumps/Pump Facilities/Controls, Monitoring/Reporting/Data Verification, System Management and Operation, and Operator Compliance with State Requirements. Each element is comprised of several components. The water system needs to comply with all regulations pertaining to each element. If the Division of Drinking Water (DDW) identifies a significant deficiency in any element category during a Sanitary Survey, the water system will be required to correct the significant deficiency in a specified time frame.

System Description and Information

The CBMWC operates under a domestic water supply permit, permit number 04-06-97P-012, issued by the DDW on April 21, 1997. CBMWC is classified as a community water system. It is located in western San Luis Obispo County along Highway 1 bordering the Pacific Ocean. CBMWC provides potable water to the residents in the community of Cayucos. Its service connections include residential housing, commercial and institutional, industrial and landscape irrigation.

CBMWC operates an active connection to San Luis Obispo County Service Area 10 (SLO Co. CSA 10), one standby well, one domestic water storage reservoir, and a distribution system. CBMWC serves an estimated 2,577 people through 770 connections. Of the active connections: 724 connections are for residential and 46 are for commercial or institutional. CBMWC reported 13 other types of connections in the 2017 Annual report. DDW database has a total number of 765 active connections. There are no inactive connections reported by CBMWC for 2017.

DDW previously conducted a Sanitary Survey of CBMWC on September 11, 2015. No enforcement action has been taken or violations been cited against the water system since the previous Sanitary Survey.

Source of Information
All information included in this report is from DDW files, CBMWC personnel, and a site visit on February 13, 2019.

II. INVESTIGATION AND FINDINGS

II.a Element 1 – Sources

CBMWC's active source of water comes from a connection with SLO Co. CSA 10. It maintains one standby well and a few interconnections with Morro Rock Mutual Water Company.

II.a.1 Purchased Water

CBMWC purchases treated water from SLO Co. CSA 10 through a six inch connection which has a capacity of 600 gallons per minute (gpm). The purchased water mainly consisted of treated surface water and supplemented by groundwater. CBMWC can purchase up to 222 acre-feet or 72.3 million gallons (MG) of water from SLO Co. CSA 10.

Treated Surface Water
The Whale Rock Reservoir is SLO Co. CSA 10's primary source of water. The Whale Rock Reservoir captures water from a 20.3 square mile watershed and has a maximum capacity of 38,967 acre-feet. Currently it is at about 74 percent full. The Whale Rock Reservoir is created by the construction of an earthen dam on Old Creek near the community of Cayucos by the Department of Water Resources. The construction began in October 1958 and was completed in April 1961. The reservoir provides water to SLO Co. CSA 10, City of San Luis Obispo, Cal Poly State University and California Men's Colony. The last three groups make up the Whale Rock Commission (Commission). The Commission operates the recreational facilities at the reservoir. The reservoir does not allow body-contact activities; permitted activities including shore-line fishing, picnicking, hiking and bird watching. There are vault toilets located along the shore.

Water from the Whale Rock Reservoir is obtained through a multiport tower. The raw surface water from the reservoir is treated at SLO Co. CSA 10's Cayucos Water Treatment Plant. The treatment plant uses a packaged Microfloc Trident filtration system (direct filtration). The filtered water is treated with chlorine before leaving the treatment plant. The treated water meets the Surface Water Treatment Rule (SWTR) requirements.

Whale Rock Well – CAWO
SLO Co. CSA 10 maintain one active well. The water from the well can be pumped directly into CBMWC's distribution system or to the Cayucos Water Treatment Plant. The well has a capacity of 170 gallons per minute (gpm). The water leaving the well is treated with chlorine.

II.a.2 Standby Well

CBMWC has one standby well – Well 1. The well is located near SLO Co. CSA 10's surface water treatment plant and about 166 feet from the percolation ponds. There are no sewer lines and sewage disposal facilities located within 50 and 100 feet of the well, respectively. The well is physically disconnected from CBMWC's distribution system. The well is considered to be under the direct influence of surface water. If used, water from the wells needs to be treated to comply with the SWTR. CBMWC conducted the drinking water source assessment of Well 1 in

December 2001. The following table lists the top possible contaminating activities for the well.

Table 1: Possible Contaminating Activities		
Well	Physical Barrier Effectiveness	Possible Contaminating Activities (top ranked)
Well 1	Moderate	Agricultural drainage, low density septic systems, sewer collection systems and agricultural wells

Well 1
The well was constructed in 1942 with a depth of 60 feet. The well is not housed. The well site is surrounded by a fence. The well is equipped with a 12-inch steel casing. The well is sealed at the surface and there is no information regarding the annular seal. The well has two impervious clay layers. The clay layers are located at the depth of two feet (2 feet thick) and 11 feet (14 feet thick). The well has an electrical motor and a 15 horse-power (hp) Dumfost submersible pump with a capacity of about 190gallons per minute (gpm).

Table 2: Active Well Information					
Source Name	PS Code	Well Yield (gpm)	Highest Perforations (ft)	Pump Type	Pump Capacity (gpm)
Well 1	4010015-001	115	Unknown	submersible	190

Note: ft = feet, gpm = gallons per minute

Table 3: Water Demand Data			
Year	Maximum Day Demand (MG)	Maximum Month Demand (MG)	Annual Water Demand (MG)
2008	0.34	6.69	51.76
2009	---	---	---
2010	0.31	6.17	48.14
2011	0.33	5.97	46.76
2012	0.27	5.87	48.29
2013	0.31	6.11	51.13
2014	0.31	6.14	50.17
2015	0.22	4.60	41.46
2016	0.23	4.84	40.10
2017	0.25	5.18	40.94

*MG – million gallons. Some of the maximum day demand and monthly demand are calculated from the annual demand.

The capacity of the connection to SLO Co. CSA 10 is 600 gpm or 0.86 MG per day. The potable water reservoir can store up to 250,000 gallons of water. Based on the highest maximum day demand of 0.34 MG from 2008, CBMWC's connection to SLO Co. CSA 10 is capable of meeting the maximum day demand. The reservoir capacity cannot meet the maximum day demand according to data from the last 10 years.

II.b Element 2 – Treatment

CBMWC does not provide any treatment to the purchased water. The purchased surface water is treated and disinfected by SLO Co. CSA 10. If the standby groundwater well is used, the well water needs to be treated to meet SWTR requirements.

II.c Element 3 – Distribution System

CBMWC's water distribution consists of one distribution pressure zone with 12 miles of pipeline. The pressures in the distribution zone range from 60 to 82 pounds per square inch (psi) and is

maintained by Tank 1 and the connection to SLO Co. CSA 10. CBMWC's water mains consist of 2 to 12-inch asbestos cement and polyvinyl chloride (PVC) pipes. CBMWC has a long-term plan to replace the asbestos mains with at least PVC pipes.

Before using newly installed mains or water mains that have been taken out of service for maintenance or repair, CBMWC needs to disinfect the water mains according to American Water Works Association (AWWA) disinfection procedures and collect bacteriological activity samples; the samples shall be negative for coliform bacteria prior to the water mains being placed into service. CBMWC shall use products that meet the NSF Standard 60 and 61 when disinfecting and/or replacing the new, repaired or replaced water mains.

CBMWC has completed the lead service line inventory and reported that it does not have any lead service lines in the distribution system. The service lines include 779 high density and 2 PVC lines. CBMWC does not serve any school in its service area. It is considering re-routing a section of the water main from Lucerne Street to North Ocean Avenue to be away from the ocean bluff.

CBMWC flushes the dead ends every year and exercises the distribution system valves at least once a year. CBMWC maintains 25 backflow prevention devices to protect its water system. It has an ongoing program of surveying the backflow prevention devices. Jon Williams of San Luis Obispo County Environmental Health Services is the Cross Connection Control Program Coordinator. CBMWC is required to test all the backflow prevention devices every year. New services shall be evaluated for any cross connections and backflow hazards. CBMWC should periodically survey existing service connections, for potential backflow hazards or cross connections. CBMWC conducts weekly inspections of the distribution system.

Table 4: Backflow Prevention Device Testing Results

Year	Total # in System	# Installed	# Tested	# Failed	# Repaired
2015	24	2	23	4	4
2016	25	0	25	0	2
2017	25	0	25	0	1

II.d Element 4 – Finished Water Storage

CBMWC maintains one potable water storage reservoir for the distribution system: Tank 1. The tank has a capacity of 250,000 gallons. Tank 1 was constructed above ground in 1998 using welded steel. The overflow discharges to a sump which leads to the street outside the reservoir site. The tank is located within the community of Cayucos. It is fenced with locked gate access. The tank has a separate inlet and outlet; it is filled from the top and discharged from the bottom**.** The tank's overflow is screened. Due to strong wind, the tank's air vent was not inspected during the site visit. CBMWC took pictures of the air vent and roof and sent a copy to DDW on March 28, 2019. The pictures showed chipped paints and rusted spots on top of the reservoir. CBMWC has scheduled tank cleaning and painting in the summer of 2019. **Based on the pictures sent by CBMWC, the base of the hatch looked very rusty; CBMWC needs to ensure no holes are created by rusting in those areas and seal any holes if existed.**

Table 5: Active Reservoir Info

Name	Type	Year Built	Capacity (gallons)	Comments
Tank 1	Welded Steel	1998	250,000	---

II.e Element 5 – Pumps, Pump Facilities, and Control

CBMWC does not operate any booster pump facilities for its distribution system. The pressure in the distribution system is maintain by Tank 1 and the connection to SLO Co. CSA 10.

II.f Element 6 – Monitoring, Reporting, and Data Verification

CBMWC has one standby well. The standby well shall be monitored every nine years for general physical parameters, general minerals, inorganic chemicals, radiological chemicals, volatile organic chemicals (VOCs) and non-volatile synthetic organic chemicals (SOCs). The standby well needs to be monitored for total coliform bacteria when in use, and fecal coliform bacteria (*E. coli*) when in use.

CBMWC is also required to routinely monitor its distribution system for total coliform bacteria, fecal coliform bacteria (*E. coli*), lead and copper, disinfection byproducts, chlorine residuals, and asbestos when the water has been determined to be aggressive and there are asbestos containing mains in the distribution system.

1,2,3-Trichloropropane Monitoring
DDW implemented the MCL for 1,2,3-Trichloropropane (1,2,3-TCP) on December 14, 2017. The 1,2,3-TCP MCL and Detection Limits for Purposes of Reporting (DLR) are set at the same level, at 5 parts per trillion (ppt). Community and non-transient-non-community (NTNC) water systems are required to start the initial four quarters of 1,2,3-TCP monitoring beginning January 1, 2018. If 1,2,3-TCP is detected from a source, the community or NTNC water system must contact its regulating DDW District Office and conduct appropriate follow up monitoring according to the Drinking Water regulations.

After completing the initial monitoring where a source has not had 1,2,3-TCP detection, a community or NTNC water system must sample that source every three years. If the water system serves 3,300 or fewer people, only one sample is required; if the water system serves more than 3,300 people, then two quarterly samples are required.

Water systems need to monitor standby sources once every three years for three consecutive cycles, before water systems may be reduced to monitoring once every nine years. The first round of monitoring for 1,2,3-TCP for standby sources is due by January 1, 2021.

Currently, the Environmental Laboratory Accreditation Program (ELAP) certifies SRL524M as the only analytical method for detecting 1,2,3-TCP to the DLR level. A community or NTNC water system may use sampling results (tested using SRL524M method) from 2016 and/or 2017 to substitute up to three of the four initial quarterly samples for groundwater sources (no surface water substitution). The request must be made in writing to the regulating DDW District Office. More information can be found in the following link to DDW's 1,2,3-TCP webpage –

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/123TCP.html

II.f.1 Chemical Source Monitoring and Reporting

II.f.1.A Source Monitoring Schedule

The following table shows the previous monitoring dates, the monitoring frequencies and the next due dates for future monitoring for primary and secondary chemicals, general physicals and minerals of the source waters.

Table 6A: Chemical Monitoring of Sources						
Source Name & PS Code		General Physical & Minerals	Inorganic	Radiological	VOCs	SOCs*
Well 1 4010006-001	Last Sample	5/18/2011	5/16/2011	5/16/2011	5/16/2011	5/26/2011
	Frequency	9 Years	9 Years	9 Years	9 Years	9 years
	Next Sample	May 2020	May 2020	May 2020	May 2020	May 2020

Table 6B: Chemical Monitoring of Sources					
Source Name & PS Code		Nitrite (As N)	Nitrate (As N)	Perchlorate	Hexavalent Chromium
Well 1 4010006-001	Last Sample	5/18/2011	5/15/2018	5/16/2011	Monitoring pending on new regulations
	Frequency	9 Years	1 year	9 Years	
	Next Sample	May 2020	May 2019	May 2020	

For inorganic chemicals monitoring, **Well 1 was last sampled for asbestos on July 16, 2002 and is currently overdue for asbestos monitoring. CBMWC shall sample Well 1 for asbestos and request its laboratory to send the results to DDW electronically.** SOCs monitoring schedules are for atrazine and simazine. CBMWC has completed the initial 1,2,3-TCP monitoring of the well in November 2018 and needs to continue monitoring 1,2,3-TCP once every three years.

II.f.1.B Source Monitoring Results

General Physical and Minerals (Secondary Drinking Water Standard)

Table 7: General Physical and Minerals						
	MCL	DLR	Well 1	Whale Rock Reservoir -Raw	Whale Rock Reservoir -Treated	Whale Rock Well
Aggressive Index‡			12.6	12.9	12.7	12.4
Bicarbonate Alkalinity (mg/L) ‡			463.6	248.9	270.8	417.2
Calcium (mg/L) ‡			60.0	54	54	70
Carbonated Alkalinity (mg/L) ‡			ND	9	0	0
Hydroxide Alkalinity (mg/L) ‡			ND	0	0	0
Magnesium (mg/L) ‡			59.0	39	40	54
pH‡			7.8	8.34	8.2	7.7
Sodium (mg/L) ‡			62.0	32	36	51
Total Hardness as $CaCO_3$ (mg/L) ‡			390.0	290	300	400
Aluminum (mg/L)	0.2		ND	0.054	0.11	0.0082
Color (Units)	15		12.0	8	1.0	1
Copper (mg/L)	1.0	0.05	ND	ND	ND	ND
Foaming Agents (MBAS) (mg/L)	0.5		ND	ND	ND	ND
Iron (mg/L)	0.3	0.1	**1.4**	0.051	ND	ND
Manganese (mg/L)	0.05	0.02	**0.2**	ND	ND	0.017

Table 7: General Physical and Minerals						
	MCL	DLR	Well 1	Whale Rock Reservoir -Raw	Whale Rock Reservoir -Treated	Whale Rock Well
Methyl-tert-butyl ether (MTBE) (mg/L)*	0.005		ND	ND	ND	ND
Odor – Threshold (Units) at 60° Celsius	3	1	2.1	**4**	1.0	1
Silver (mg/L)	0.1	0.01	ND	ND	ND	ND
Thiobencarb (mg/L)†	0.001		**ND**	**---**	**---**	ND
Turbidity (Units)	5	0.1	**11**	1.3	0.08	0.05
Zinc (mg/L)	5.0	0.05	0.077	ND	ND	ND
Total Dissolved Solids (mg/L)	1000*		530.0	360	340	500
Specific Conductance (uS/cm)	1,600*		950.0	650	680	890
Chloride (mg/L)	500*		57.3	24.3	29.1	51.8
Sulfate (mg/L)	500*	0.5	47.0	88.4	88.6	45.1

*The values for Total Dissolved Solids, Specific Conductance, Chloride, and Sulfate are upper values of MCL ranges for which no fixed MCL has been established.
†Thiobencarb is waived from monitoring.
‡These constituents do not have any MCLs or DLRs.
MCL = maximum contaminant levels, DLR = Detection Limits for Purposes of Reporting
ND = Non-detect

CBMWC's well met the general physical and minerals MCLs, except for iron, manganese and turbidity. It shall continue to monitor its potable water wells according to the monitoring schedule for general physical and mineral constituents. The purchased water from SLO Co. CSA 10 met all general physical and minerals MCLs.

Inorganic Chemicals

CBMWC's wells met the inorganics drinking water standards. CBMWC shall continue to monitor its sources for inorganics according to the monitoring schedule. The purchased water also met the inorganics drinking water standards.

Table 8: Inorganic Chemicals						
	MCL (mg/L)	DLR (mg/L)	Well 1	Whale Rock Reservoir -Raw	Whale Rock Reservoir -Treated	Whale Rock Well
Aluminum	1.	0.05	ND	0.054	0.11	0.0082
Antimony	0.006	0.006	ND	ND	ND	ND
Arsenic	0.010	0.002	ND	0.0026	ND	ND
Asbestos*	7 MFL*	0.2 MFL > 10 um*	ND	ND	---	ND
Barium	1.	0.1	0.14	0.081	0.07	0.11
Beryllium	0.004	0.001	ND	ND	ND	ND
Cadmium	0.005	0.001	ND	ND	ND	ND
Chromium (total)	0.05	0.01	ND	ND	ND	ND
Cyanide*	0.15	0.1	ND	ND	ND	ND
Fluoride	2.0	0.1	0.33	0.297	0.315	0.317
Lead		0.005	ND	ND	ND	ND
Mercury	0.002	0.001	ND	ND	ND	ND
Nickel	0.1	0.01	ND	ND	ND	ND
Nitrate (as N)	10.	0.4	0.475	0.146	0.138	0.749
Nitrate + Nitrite (sum as N)	10.	---	0.921	ND	ND	0.739
Nitrite	1.	0.4	ND	ND	ND	ND
Perchlorate	0.006	0.004	ND	ND	ND	ND
Selenium	0.05	0.005	0.0092	ND	ND	0.021

Table 8: Inorganic Chemicals						
	MCL (mg/L)	DLR (mg/L)	Well 1	Whale Rock Reservoir -Raw	Whale Rock Reservoir -Treated	Whale Rock Well
Thallium	0.002	0.001	ND	ND	ND	ND

*MFL = million fibers per liter, MCL for fibers exceeding 10 micro-meter (um) in length.
BDL is set at or below the DLR levels.

Radioactivity

The following table has the latest monitoring results for radiological activities for CBMWC's wells. CBMWC has completed this round of radiological activity sampling. The purchased water met radiological activity MCLs.

Table 9: Radiological Results					
	Gross Alpha (GA)	GA Counting Error	Radium 226	Radium 228	Uranium
MCL (pCi/L)	15	---	Ra-226 + Ra-228 = 5		20
DLR (pCi/L)	3	---	1	1	1
Well 1	ND	1.21	**GA+0.84xCE-Ur**: ¥ Sampling event completed.		**GA+0.84xCE:** † Sampling event completed.
Whale Rock Reservoir -Raw	1.78	1.62	Sampling event completed.		Sampling event completed.
Whale Rock Reservoir -Treated	1.53	0.83	---		---
Whale Rock Well	2.42	2.02	Sampling event completed.		Sampling event completed.

†GA+0.84xCE is used to find out if further sampling is required for uranium and/or radium isotopes. GA=Gross Alpha result; CE is the gross alpha counting error.
¥GA+0.84xCE-Ur is used to determine if further sampling for radium isotopes. Ur is uranium concentration.

Volatile Organic Chemicals

The most recent sampling results showed Well 1's VOCs levels were below the DLR levels. CBMWC shall continue to monitor its sources for VOCs according to the monitoring schedule. The Whale Rock Reservoir raw and treated water, and the Whale Rock Well water were non-detect according to the latest VOCs monitoring results.

Non-Volatile Synthetic Organic Chemicals (SOCs)

CBMWC is required to test its well for 1,2,3-TCP, atrazine and simazine. The following table has the latest results for the CBMWC's wells, Whale Rock Reservoir Raw and treated water, and Whale Rock Well.

Table 11: Non-Volatile Synthetic Organic Chemicals						
	MCL (ug/L)	DLR (ug/L)	Well 1	Whale Rock Reservoir -Raw	Whale Rock Reservoir -Treated	Whale Rock Well
Atrazine	1	0.5	ND	Waived	---	ND
Simazine	4	1	ND	Waived	---	ND
1,2,3-TCP	0.005	0.005	ND	ND	ND	ND

Raw Water Bacteriological Monitoring and Reporting

CBMWC is required to monitor its well quarterly for bacteriological activity when in use. The well is in standby status for years and CBMWC has not monitor the wells for bacteriological activity during that time.

II.f.2 Distribution System Monitoring and Reporting

II.f.2.A Distribution System Monitoring Schedule

The Aggressive Index (AI) values for the Whale Rock Reservoir treated water and Whale Rock Well are 12.7 and 12.4, respectively. Since the AI values from those sources are over 11.5, the water is not considered corrosive towards asbestos cement pipes. CBMWC does not need to take any asbestos samples in its distribution systems.

CBMWC purchases treated surface water is chlorinated and is required to monitor the chlorine residual in its distribution system per SWTR requirements. CBMWC needs to monitor for disinfection by-products – haloacetic acids (HAA5) and total trihalomethanes (TTHMs) – in the distribution system.

CBMWC took lead and copper samples in June 2016. The next round of sampling will be due in the summer months of 2019. The following table has the monitoring schedules for the distribution system.

Table 13: Distribution System Monitoring

Site Name & PS Code		HAA5	TTHMs
STG 2 – PRB 9 Cayucos Creek Bridge 4010006-005	Last Sample	1/17/2019	1/17/2019
	Frequency	Quarterly	Quarterly
	Next Sample	April 2019	April 2019
STG 2 – PRB 6 24th and Pacific 4010006-006	Last Sample	1/17/2019	1/17/2019
	Frequency	Quarterly	Quarterly
	Next Sample	April 2019	April 2019

II.f.2.B Distribution System Monitoring Results

Disinfection Byproducts Monitoring Results

CBMWC currently collects quarterly samples from two different locations in its distribution system to test for HAA5 and TTHMs to comply with monitoring requirements for DBPs. The following table has the monitoring results for HAA5 and TTHMs since 2013.

Table 14: HAA5 and TTHMs Results

DBPs	2015	2016				2017				2018				2019
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
STG 2 – PRB 9 Cayucos Creek Bridge														
HAA5	6.1	7.5	8.0	2.7	7.5	22.6	11.1	8.4	5.9	11	6.5	4.7	4.1	6.9
TTHMs	42.9	26.9	56.7	24.0	61.6	60.8	39.4	30.9	22.3	31	32.7	22.2	26.0	37.0
STG 2 – PRB 6 24th and Pacific														
HAA5	3.4	5.4	6.6	1.5	2.9	16.7	7.3	6.8	2.8	9	4.2	3.9	6*	6.4
TTHMs	27.3	30.4	43.5	11.7	35.2	38.6	26.1	22.0	15.1	37	23.4	16.8	21.5	30.2

HAA5 MCL=60 ug/L, TTHMs MCL=80 ug/L. Q=Quarters

*2018 4th Quarter TTHM sample was damaged (lab notified CBMWC on 1/16/2019) and the result was from sample taken on 1/17/2019.

Chlorine Results

To comply with the maximum residual disinfectant level (MRDL) for chlorine of 4.0 mg/L and SWTR requirements, CBMWC monitors its distribution system for chlorine residual. The following table has the monthly chlorine residual level results from October 2015 to present.

Table 15: Distribution Chlorine Residuals Results (mg/L)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015										0.88	1.07	1.25
2016	0.97	1.07	1.12	1.00	0.87	0.83	0.78	1.09	1.06	0.96	1.15	1.12
2017	0.89	0.84	0.86	1.14	1.13	1.15	1.23	1.16	1.05	1.12	1.43	1.32
2018	1.20	1.15	1.01	1.37	1.31	1.17	1.27	1.14	1.09	1.24	1.41	1.29
2019	1.23	1.08										

Lead and Copper Results

To comply with the Lead and Copper Rule (LCR), CBMWC collects and tests 10 LCR samples from its customers' taps for reduced LCR monitoring. Recent results are summarized in the following table. The lead and copper 90th percentile results were under the action level for samples taken in 2013 and 2016. CBMWC notified its customers of the latest Lead and Copper testing results.

Table 16: Lead and Copper Monitoring of Distribution System					
Sampling Date	# of Samples	90th% Lead (mg/l)		90th% Copper (mg/l)	
		Action Level	0.015	Action Level	1.3
		DLR	0.005	DLR	0.050
August 2013	10	<0.005		0.051	
June 2016	10	0.0012		0.091	

II.f.3 Bacteriological Monitoring and Reporting

DDW has a copy of CBMWC's 2019 Bacteriological Sample Siting Plan (BSSP) in file. The BSSP shall be updated when necessary or at least every 10 years. CBMWC conducts monthly monitoring of its distribution system for bacteriological quality. It has two distribution sampling locations for bacteriological monitoring purpose and is required to collect at least two bacteriological samples per month.

The following table summarizes the number of samples collected each month, the number of samples tested positive for total coliform bacteria and for *E. coli* for CBMWC's distribution system since August 2015.

Table 17: Bacteriological Monitoring (Total Coliform and *E. coli*)												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015								4-0-0	4-0-0	4-0-0	4-0-0	4-0-0
2016	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0
2017	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	7-1-0
2018	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0	4-0-0
2019	4-0-0	4-0-0										

Key: # of samples collected - # of total coliform positive results - # of *E. coli* positive results

II.g Element 7 – System Management and Operations

CBMWC is a community water system and has been serving the Cayucos community since 1929. Ray Bruno is the Chief Operator and Water System Supervisor. Grace Pope is the Administrative Supervisor. CBMWC charges its customers a monthly based rate and variable

usage rate for the water services. It increased the flat base rate by $2.31 per month on December 1, 2016 and the new connection fee was updated on June 4, 2013. CBMWC has a reserve fund for its operations and in case of emergency.

DDW has an Emergency Notification Plan (ENP) on file for CBMWC received on March 1, 2019. DDW has a copy of the water system's updated 2018 Emergency Disaster Response Plan. CBMWC has submitted its 2017 Annual Report to DDW through the Electronic Annual Reporting System. CBMWC uploaded a copy of its 2017 Consumer Confidence Report (CCR) to the Annual Report website on May 17, 2018.

CBMWC reported and investigated one distribution system problem in 2017 regarding a service connection line leak. It did not receive any complaints from its customers in 2017.

Drought Preparedness
The State will continue to update water conservation measures depending on current weather conditions. Therefore, the States measures continue to change based on current conditions. DDW recommends that CBMWC stays informed by visiting the State's Water Conservation Portal at –

http://www.water boards.ca.gov/water_issues/programs/conservation_portal/.

DDW also recommends that CBMWC conducts an ongoing well production and groundwater level monitoring program as well as ensuring any water conservation measures are achieved that are required by the State. The well production data shall be recorded on minimum of a monthly basis and reported in the EAR.

Water System Resiliency and Climate Change
CBMWC purchases all its water from SLO Co. CSA 10 with the main source of water coming from the Whale Rock Reservoir. It reported in the 2017 Annual Report that the Whale Rock Reservoir's storage is medium impacted by drought, but not by other conditions. CBMWC plans to implement conservation measures. It has constructed interconnections with Morro Rock Mutual Water Company.

California is making efforts to adapt to a changing climate. A principle of the state's adaptation strategy document, Safeguarding California, is to prioritize actions that not only mitigate greenhouse gas emissions, but also help the state prepare for climate change impacts. Improved coordination, implementation, and integration of adaptation planning efforts and funding of the state's climate policies can directly protect the state's natural and built infrastructure, communities, environmental quality, public health, safety and security, natural resources, and economy from the unavoidable impacts of climate change. Drinking water systems are encouraged to use U.S. EPA's Climate Resilience Evaluation and Awareness Tool (CREAT) –

https://toolkit.climate.gov/tool/climate-resilience-evaluation-awareness-tool-creat

II.h Element 8 – Operator Compliance with State Requirements

CBMWC is classified as a distribution grade 2 (D2) and treatment grade 1 (T1/D1) water system. Ray Bruno is the treatment and distribution Chief Operator. He has a D3 operator certification. The following table has the CBMWC operators' certifications information. All the operators' certifications are current.

Table 18: Operator Certifications			
Name	Grade	Operator Number	Expiration Date
Ray Bruno	D3	45004	3/1/2021
Ron Boyte	D2	19539	6/1/2020

III. CONCLUSION

The review of CBMWC's reports and routine water quality monitoring results indicates the water meets all the applicable primary and secondary maximum contaminant levels. CBMWC is capable of providing safe potable water to its customers that meet the California drinking water standards.

A site inspection of CBMWC's wells, storage tanks and distribution system showed CBMWC manages its system properly and according to the California drinking water laws and regulations.