DATE: **May 17, 2018**

TO: **Watershed Conservation Authority Governing Board**

FROM: **Michelle Tarian, Associate Project Manager**

THROUGH: **Mark Stanley, Executive Officer**

SUBJECT: **Item 18: Consideration of a resolution to authorize The Chair or designee to negotiate and enter in to a professional services contract to provide services for Azusa Springs Water System.**

RECOMMENDATION: That the Watershed Conservation Authority (WCA) Governing Board approve a resolution to authorize The Chair or designee to negotiate and enter into a professional services contract to provide services for the Azusa Springs Water System for a budgeted amount not to exceed $34,568.

PROJECT DESCRIPTION: The Azusa Springs Water System (ASWS) is a public water system that serves the WCA/ River and Mountains Conservancy (RMC) offices and three residential units located at the Azusa River Wilderness Park (Exhibit A). The County of Los Angeles Department of Public Health identifies the system as a transient non-community water system with a Surface Water Treatment Plant. Per the requirements identified in the water system permit No. 131018-1909644 issued August 2013, WCA is the legal owner of the ASWS and responsible for complying with all requirements and conditions defined in the permit (Exhibit B). The permit requires that the ASWS is operated by a T2 and D1 Certified Treatment and Distribution Operator. Since WCA does not employ a Certified Operator, WCA contacts out ASWS service operations for compliance with the State requirements.

Operating services required by the State include meeting all statutory and regulatory drinking water requirements and are achieved through plant monitoring, water sampling, state required reporting, and routine maintenance and system upgrades. Services are required on an ongoing basis with 24-on call emergency assistance and weekly site visits, in addition to the time required to complete State compliance sampling and documentation. With the termination of the current water system operator as of March 4, 2019, WCA will need a new system operator contracted for the remainder of FY18/19 to ensure compliance with State water quality requirements and until a formal Request For Qualifications can be released for a long term contract.

BACKGROUND: In 2011, the WCA installed a new water filtration system for the Azusa Springs Water System (ASWS) to comply with the Los Angeles County Department of Public Health. July 2014, after WCA issued a Request for Proposals, the WCA Board authorized a contact with WaterWorks Technology (WaterWorks) to provide services for operating the ASWS for up to a five-year contract, beginning July 1, 2014 and ending June 30, 2019. Per contract WCA14503, WaterWorks Technologies responsibilities included but are not limited to:

- minimum weekly performance checks, data review, filter backwash
- semi-monthly inspections of the distribution, treatment, storage and filter systems
- preparation of monthly reports, conducting necessary and required bacteriological and water quality monitoring reports and sampling
- quarterly activities including calibration services for the chlorine analyzer
- Annual activities included preparation of the Consumer Confidence Report and periodic activities, on an as needed basis, included supply and replenishment of polymer for treatment process, updating the emergency site plan, and performing storage tank cleaning.

Additionally, WaterWorks provided 24-hour on call coverage, both virtual and physical, in the operation, maintenance, and monitoring of the treatment plant. Waterworks was responsible for all staffing issues, sampling, maintenance and consultation with all state or federal agencies inquiring as to the quality of water treated and the delivery means of that treatment.

On August 19, 2018 WaterWorks notified the State Water Resource Control Board (Control Board) of ASWS equipment damage due to a power surge that occurred on June 20, 2018. This was the first notification WCA received of a power surge or damaged water monitoring equipment. Because of the power surge, the water monitoring equipment was not providing State required readings and therefore putting the water system out of compliance. On August 20, 2018, in response to the lack of water quality readings, WCA was notified by the Control Board via email of two compliance issues happening at ASWS. A previous Total Coliform Rule Violation was issues to ASWS on May 15, 2018, for the months of March/April (Exhibit C). This was the first notification of this Violation that WCA received from the State or Treatment Operator. A second Surface Water Treatment Rule Citation was issued on Sept 24, 2018 for the months of July/August (Exhibit D). WCA was notified of this Citation in the same email from the Control Board on August 20, 2018. Due to Violation and Citation and the damaged equipment resulting in the lack of water monitoring, the Control Board issued a boil water notice to ASWS on August 20, 2018.

On October 4,2018, due to the compliance Violation, the Control Board issued an enforcement fee to the WCA in the amount of $1,400 (Exhibit E). The Control Board also notified WCA that a second fee would be issued for the second Citation. On December 15, 2019, in response to the Control Board fee and pursuant to their service contract for the operation and services needed to produce compliant drinking water under State and Federal regulations, WCA sent a letter to WaterWorks requesting reimbursement for the enforcement fee for the violation and requested written agreement to reimburse WCA for anticipated second enforcement fee. Additionally, on February 22, 2019, WCA sent a letter to WaterWorks notifying them of their right of recoupment for the enforcement fee per their service contract.

As of March 4, 2019, in response to the letters sent by WCA, WaterWorks officially gave a three-day notice to terminate their service contract. The notice ended their existing contract four months earlier than the original terms, which ended June 31, 2019. WCA has requested that WaterWorks complete the State required sampling for the month of February and the Annual eAR report due in April.

Because ASWS is required to produce monthly water samples to the State, WCA was in immediate need to fill the service operator position and repair all damaged equipment necessary to be removed from boil water notice. WCA reached out to twenty-two individuals and organizations, through phone calls and

emails, inquiring about providing the services outlines in the previous water system operator contract and following the defined operations outlined in the system permit and operational plan (Exhibit A & F). WCA received three informal estimates summarized below:

- ECS Company: $10,475.06/month (Exhibit G)
- Seaco Technologies: $5,300/month (Exhibit H)
- McMor Chlorination, Inc.: $2,500/month (Exhibit I)
-

All parties requested additional information and site visits to provide final detailed estimates. Until March 2019, WaterWorks was charging WCA $2,607/month. Due to the wide range of estimates for services, WCA is inviting each potential contractor to do a site visit and to talk directly with the State to confirm the requirements of the system resulting in a detailed estimates and confirmation that the contract will be awarded to the best candidate. WCA would like to enter into a short-term agreement with the bidder who best fits the WCA criteria and budget for the remainder of FY18/19. The estimated do not exceed value for the ASWS service contract award is based on the highest estimate provided by the contractors plus 10%. This short-term contract will provide time to allow WCA to put out a formal Request for Qualifications for a long-term service contract which would begin FY19/20.

In addition to the service contract, repairs to the system equipment necessary for removal from boil water notice are immediately needed for ASWS State compliance. The approximate values to upgrade the system equipment is represented in the following table:

Water System Equipment: To Remove from Boil Water ITEMS	Qty	Repair/ Shipping	Unable to Fix/Buy New (including 10% tax)
HACH Turbidity analyzers	3	$ 1,385.25	$ 4,580.66
HACH sc200 controller	1	$ 815.75	
HACH Cl2 analyzer	1	$ 1,295.75	$ 2,353.39
Total		**$ 3,496.75**	**$ 6,934.05**

FISCAL INFORMATION: Necessary system repairs and/or replacements will be funded under the budgeted Deferred Maintenance Contingency for FY18/19. Contracted operator services will be funded under the category of Water System Operation/Irrigation up to the FY18/19 budgeted amount of $26,764. Contracted services that exceed the $26,764 and do not exceed $34,568 will be budgeted from the Deferred Maintenance Contingency and the Building Maintenance and Repair budget.


Exhibit A
Item 18
Well House
Old San Gabriel Canyon Rd
Old San Gabriel Canyon Rd
3 Residential Units
Old San Gabriel Canyon Rd
Azusa River Wilderness Park
WCA
Old San Gabriel Canyon Rd
San Gabriel River Discovery Center...
4
ASWS EPS system and storage tanks

County of Los Angeles
Department of Public Health

PERMIT NO. 131018-1909644

AZUSA SPRINGS WATER SYSTEM

Los Angeles County

System 1909644

August 2013

STATE OF *CALIFORNIA*

DOMESTIC WATER SUPPLY PERMIT

Issued To

Azusa Spring Water System

Public Water System No. 1909644

By The

County of Los Angeles
Department of Public Health

PERMIT NUMBER: 131018-1909644 **DATE:10/18/2013**

WHEREAS:

I. Since the original domestic water permit No. 394-4623-921 for the ***Azusa Springs Water System*** was issued by the County of Los Angeles Department of Public Health (hereinafter, County) on March 6, 2002, there have been numerous changes and improvements being made, including the projects described in Section **C-3** of the attached Sanitary Survey Report, and, therefore, a revised full operating permit is warranted and initiated by the County.

II. This public water system is known as the ***Azusa Springs Water System (hereinafter, ASWS)*** whose headquarters is located at ***100 N. Old San Gabriel Canyon Road, Azusa, California 91702***.

III. The legal owner of ***ASWS*** is ***Watershed Conservation Authority.*** The ***Watershed Conservation Authority,*** therefore, is responsible for compliance with all statutory and regulatory drinking water requirements and the conditions set forth in this permit.

IV. The public water system is described briefly below (more detailed description of the permitted system is described in the attached Sanitary Survey Report):

The facilities include one active well with associated chlorination unit, one local surface water treatment plant with associated chlorination unit, two storage facilities, and various pipelines and appurtenances as required.

V. The service area of ***ASWS*** is shown on the service area map in ***Appendix 1*** of the Sanitary Survey Report.

And WHEREAS:

I. All of the required information relating to the proposed operation of ***ASWS's*** water system has been submitted.

II. The County has evaluated all of the information submitted and has conducted a physical investigation of ***ASWS's*** water system.

III. The County has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.

THEREFORE: The County of Los Angeles, Department of Public Health has determined the following:

I. ***ASWS's*** water system meets the criteria for and is hereby classified as a ***transient non-community*** water system.

II. The applicant has demonstrated that ***ASWS's*** water system has sufficient source capacity to serve the peak water demand.

III. The design of the water system complies with the California Waterworks Standards and all applicable regulations.

IV. The applicant has demonstrated adequate technical, managerial, and financial capacity to reliably operate the existing water system and proposed facilities.

V. Provided the following conditions are complied with, ***ASWS's*** water system should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

THE WATERSHED CONSERVATION AUTHORITY IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE AZUSA SPRINGS WATER SYSTEM'S WATER SYSTEM.

ASWS's water system shall comply with the following permit conditions:

GENERAL

1. ASWS shall comply with all state laws applicable to public water systems and any regulations, standards, or orders adopted thereunder.

2. The only approved source of domestic water supply is listed in Table 1.

Table 1: Groundwater Sources Under the Influence of Surface Water

Source	PS Code	Status	Capacity (gpm)
Well 1	1909644-001	Active	20

3. The only approved treatment facilities are listed in Table 3.

Table 3: Treatment

Facility	Treatment	Location/Remark
Surface Water Treatment Plant	Alternative Direct filtration technology – treat raw water from Well 1	EPD Plant – two dual-stage high-rate filters, located at site of storage tanks
Chlorination	Liquid sodium hypochlorite solution at Well 1 and at Water Treatment Plant effluent. The storage tanks provide disinfection contact time.	

4. No additions, changes or modifications to the sources of water supply or water treatment facilities outlined in Conditions 2 and 3 shall be made without prior receipt of an amended domestic water supply permit from the County.

5. All treatment facilities shall be operated by personnel who have been certified in accordance with the Regulations relating to Certification of Water Treatment Facility Operation, CCR, Title 22. The Chief Treatment Operator and Shift Treatment Operator shall have the minimum certifications designed in Table 4.

Table 4: Treatment Plant Classification and Minimum Operator Certification Requirement

Treatment Plant Site	Treatment Plant Classification	Min. Certification Requirement	
		Chief Treatment Operator	Shift Treatment Operator
Water Treatment Plant	T2	T2	T1

6. ASWS shall have one person designated as the Chief distribution operator with a D1 certification and one person designated as the Shift distribution operator with

a D1 certification, at a minimum. ASWS shall have one person designated as the Chief treatment operator with a T2 certification and one person designated as the Shift distribution operator with a T1 certification, at a minimum.

7. All water produced by ASWS for domestic purposes shall meet the Maximum Contaminant Levels (MCLs) established by the California Department of Public Health (State). If the water quality does not comply with the California Drinking Water Standards, treatment shall be provided to meet those standards.

8. ASWS shall maintain a program for the protection of the domestic water system against possible backflow from premises having dual or unsafe water systems in accordance with the Cross-Connection Regulations, Title 17 of CCR. All backflow devices shall be tested annually.

SURFACE WATER TREATMENT PLANT

9. The Well 1 groundwater under the direct influence of surface water (GWUDI) source shall be deemed an approved source that shall meet 99.9 percent (3-log) reduction of Giardia, 99.99 percent (4-log) reduction of viruses, and 99 percent (2-log) reduction of Cryptosporidium through removal and inactivation.

10. ASWS shall comply with requirements of the Surface Water Treatment Rule (SWTR). The EPD (Environmental Products Division) filtration technology is an approved alternative technology with the credit of 2.0 log removal of Giardia, 1.0 log removal of virus, and 2.0 log removal of Cryptosporidium, provided that operating and performance criteria are met. The disinfection process must therefore provide at least 1.0 log inactivation of Giardia and 3.0 log inactivation of viruses, provided that operating and performance criteria are met.

11. The EPD Plant shall not be operated above the design capacity of 20 gpm during normal operation. The filter bed shall not be operated above the filtration rates of 5.0 and 12.0 gpm/sq. ft for treating raw water turbidity up to 20 and 6 NTU, respectively, as established by the State's Alternative Filtration Demonstration Studies.

12. There shall be no bypassing of any treatment process, at any time. These processes include coagulant feed, dual-stage filtration, and disinfection.

13. The turbidity level of the filtered water shall be equal to or less than 0.2 NTU in 95 percent (95%) of the measurements taken each month, shall not exceed 5 NTU at any time, and shall not exceed 1.0 NTU for more than eight (8) consecutive hours while in operation.

14. Following any backwashing event, the turbidity of the effluent shall not exceed any of the following:

    a) 2.0 NTU.
    b) 1.0 NTU in at least 90 percent of the interruption events during any consecutive 12-month period.
    c) 0.2 NTU after the filter has been in operation for 4 hours.

15. ASWS shall contact the County by phone within four (4) hours of any acute violation or occurrence of a hazardous situation.

16. ASWS is required to notify the County within 24 hours by telephone whenever:

    a) The turbidity of the plant effluent exceeds 5.0 NTU at any time.
    b) More than two consecutive turbidity samples of the plant effluent taken every four hours exceed 1.0 NTU.

16. The plant effluent must be continuously chlorinated and shall have a minimum chlorine residual of at least 0.2 mg/L. The plant effluent shall be monitored daily for chlorine residual, pH, and temperature, and a daily CT calculation must be performed.

17. The disinfection residual shall be detectable in at least 95 percent of the samples taken from the distribution system based on the samples collected during two consecutive months. The presence of heterotrophic plate count (HPC) of 500 CFU/mL or less may be substituted for a detectable residual. The residual measurements shall be made in conjunction with coliform sampling.

18. The plant effluent turbidity shall be measured and recorded continuously. Continuous turbidity measurements may be substituted for grab sample monitoring provided ASWS validates the accuracy of the measurements on a weekly basis. Monitoring shall be conducted in accordance with the approved Water Treatment Plant Operations Plan and Technical Report (Operations Plan).

19. ASWS shall submit a monthly operation report to the County by the 10th day of the following month. The report shall include the daily turbidity measurements for raw water and treated water, chlorine residual measurements of the treated water, CT calculations, and a log of turbidimeter calibrations, a list of water quality complaints and reports of water borne illness received from consumers. Treatment plant records shall be maintained for at least five (5) years.

20. ASWS shall comply with the SWTR's reliability features including:

    a) Alarm - for all critical functions including pressure-sensing devices on the discharge of all chemical feed equipment to signal a failure of chemical feed pumps, motors, and power outages
    b) Dedicated standby replacement and chemical storage available to assure continuous operation and control of unit processes for coagulation, filtration and disinfection
    c) Backup power supply

21. ASWS shall physically inspect and evaluate the EPD filters annually for such factors as media condition, mud ball formation, and short-circuiting. The filter evaluation report shall be submitted to the County by January of every year.

22. The raw water alarm and automatic plant shutdown shall be activated at a raw water turbidity of 10 NTU for more than 10 minutes. The plant operator shall perform an on site inspection every time the influent turbidity exceeds 6 NTU. Otherwise, the plant should be taken off-line within 30 minutes of notification until the inspection can be done.

23. Operation of the plant should be adjusted so that the effluent recording turbidimeter and chlorine residual recorder will shut down the plant whenever the treated water turbidity exceeds 0.5 NTU for more than 30 minutes and/or the chlorine residual in the effluent of plant falls below 0.2 mg/L for more than 4 hours.

24. Each on-line turbidimeter should be calibrated at least every three months. Also, the on-line units should be standardized against the bench top turbidimeter weekly. Logbooks shall be maintained for each unit that details calibration, cleaning, and maintenance. The logbooks shall include date, model, location of turbidimeter, and procedures used.

25. ASWS shall maintain daily records of flow, chlorine residuals, and filtered water turbidity measurements. Also, ASWS should keep records of the raw water turbidity, and treated water pH and temperature necessary for calculation of disinfection residual effectiveness.

26. ASWS shall keep a complete record of all emergency events and scheduled interruptions in water service. These records should include:

    a) Location of the problem.
    b) Cause of the interruption.
    c) Date, approximate time, and duration of the problem.
    d) Action steps taken to correct the problem
    e) Precautions taken to minimize contamination of the supply and notification of affected users.

27. The plant shall be operated in accordance with the Operations Plan approved by the County.

OPERATION

28. ASWS shall maintain operational records including the total volume of water treated daily and the total volume of chemical used for at least five (5) years.

29. ASWS shall inspect and verify that all equipment at the facility is working properly on a weekly basis. These equipment include but are not limited to:

    a) Flowmeter and recorder
    b) Influent and effluent turbidimeters and recorders
    c) Chlorine analyzer and recorder.

30. All equipment shall be maintained and calibrated according to procedures specified by the manufacturers.

31. ASWS's operational and maintenance records shall be kept for a minimum of five years and be made available for the County to review upon request. The records should include logs of equipment failure and corrective actions performed.

SOURCE WATER MONITORING AND OTHERS

32. ASWS shall monitor groundwater and surface water sources in accordance with the most recent edition of the Vulnerability Assessment and Monitoring Frequency Guidelines. In addition, ASWS shall consistently monitor for aluminum at the surface water treatment plant effluent on a monthly basis. ASWS shall submit the data to the County utilizing the Electronic Data Transfer (EDT) by the 10th of the following month using the given PS Codes.

33. Operators (shift operators) and supervisor personnel (chief operator) who make operational decisions on the treatment facilities as identified in Condition 3 shall have a copy of and shall be familiar with the conditions of the water supply permit conditions. A copy of the Operations Plan and the permit document shall be maintained at ASWS's office for reference.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the County of Los Angeles Department of Public Health. This permit is non-transferable. Should the ***Azusa Springs Water System*** water system undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Sanitary Survey Report, or any addition of distribution system storage reservoirs shall not be made unless an application for such change is submitted to the County of Los Angeles Department of Public Health.

This permit shall be effective as of the date shown below.

FOR THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC HEALTH

October 18, 2013
Date

Vincent Gallegos, R.E.H.S.
Environmental Health Specialist

CALIFORNIA Water Boards

EDMUND G. BROWN JR. GOVERNOR

MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

May 15, 2018

Mr. George Cambero
Azusa Springs Water System
Water System Operator
2415 S. Westboro Avenue
Alhambra, CA 91803

Dear Mr. Cambero:

SYSTEM NO. 1909644 – NOTICE OF VIOLATION ON TOTAL COLIFORM RULE MAXIMUM CONTAMINANT LEVEL AND MONITORING REQUIREMENTS IN MARCH AND APRIL 2018

This letter is to confirm that Azusa Springs Water System (ASWS) was in violation of the Total Coliform Rule (TCR) for the months of March and April 2018. Specially, ASWS failed to collect a repeat sample set within 24 hours of being notified of the positive result in March and April 2018 and more than one sample collected in April 2018 is total coliform-positive. As a result, ASWS failed to comply with the *California Code of Regulations, Title 22, Section 64424 (a) and Section 64426.1 (b)(2).*

According to Bacteriological Sample Sitting Plan (BSSP) dated September 15, 2014, ASWS is required to collect one sample per month. On March 21, 2018, ASWS collected the routine distribution bacteriological sample from Sample Site 1. On March 23, 2018, Clinical Laboratory of San Bernardino, Inc. (Laboratory) notified Mr. Cornell Gillenwater, General Manager of Waterworks Technology which is contracted to operate ASWS, that Sample Site 1 was total coliform-positive. On March 30, 2018, ASWS collected four repeat samples and were all total coliform-negative. ASWS was notified on March 23, 2018 for total coliform-positive and repeat samples should have been collected within 24 hours of being notified, which should be on March 24, 2018. ASWS, however, collected repeat samples on March 30, 2018.

On April 11, 2018, ASWS collected the routine distribution bacteriological samples from Sample Site 1 together with three additional bacteriological samples. These three additional bacteriological samples are required due to total coliform-positive in March 2018. On April 12, 2018, the Laboratory notified Mr. Gillenwater that Sample Site 1 and West Hydrant were total coliform-positive. Since ASWS collects one sample per month, each total coliform-positive would require a set of four repeat samples. On April 14, 2018, all five repeat samples were tested total coliform-negative. However, on April 16, 2018, one out of four repeat samples was total coliform-positive. On April 17, 2018, the Laboratory notified Mr. Gillenwater that Sample Site 3 was total coliform-positive. On April 18, 2018, ASWS collected four repeat samples and were total coliform-negative. Again, ASWS was notified on April 12, 2018 for total coliform-positive and repeat samples should have been collected within 24 hours of being notified, which should be on April 13, 2018. ASWS, however, collected repeat samples on April 14 and 16, 2018. In addition, since ASWS collects fewer than 40 samples per month under TCR, it is a Maximum Contaminant Level (MCL) violation

when more than one sample is total coliform-positive collected in a month. In the month of April 2018, ASWS had three total coliform-positive.

As a result of ASWS failing to collect a repeat sample set within 24 hours of being notified of the positive result in March and April 2018 and more than one sample collected in April 2018 is total coliform-positive, ASWS has a monitoring violation of the TCR for the months of March and April 2018 and a TCR MCL violation for the month of April 2018.

Pursuant to state public notification regulations (Section 64463.4, Title 22, CCR), MCL violation and monitoring violation require a Tier 2 notification. Notification must be conducted within 30 days after the public water system learns of the violations. ASWS must deliver the notice to water users within the required time period by mail or direct delivery. In addition, ASWS must use one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc): 1) publication in a local newspaper, 2) posting in conspicuous public places served by ASWS's water system, or on the internet; or 3) delivery to community organizations. A template and its instructions for conducting this notification are provided in Enclosure B. The notification must be approved by the Division prior to dissemination. Enclosure C should be used to advise the Division upon completion of the notification. For more information, please refer to the following link: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Notices.html.

If you have any questions regarding this letter, please contact Mr. Thomas Tsui at (818) 551-2036.

Sincerely,

Chi Diep, P.E.
District Engineer
Metropolitan District

cc: Mr. Cornell Gillenwater, General Manager, Waterworks Technology. (via email)

Enclosures: (A) Laboratory reports (March and April 2018)
(B) Tier 2 Public Notification Template
(C) Proof of Public Notification

ENCLOSURE A

LABORATORY REPORTS (MARCH AND APRIL 2018)

Clinical Laboratory of San Bernardino, Inc.

Celebrating 50 Years of Analytical Service 1967-2017

Client:	Water Works Technology 2415 South Westboro Avenue Alhambra CA, 91803	**Contact:**	Cornell Gillenwater
		Phone:	(909) 239-0087
		Fax:	(626) 403-4121
		System:	1909644
Project:	Standard Bacti Analysis		
Sub Project:	Azusa Springs		
Sampler:	Oscar Cambero		
Sampled:	03/21/18		
Received:	03/22/18 08:20		
Reported:	03/29/18		

RESULTS

Laboratory ID	Sample Time	Sample Location	Cl Res Free (Field) mg/L	Total Coliform P/A	E. Coli P/A
18C1993-01	12:45	Azusa Springs Well		A	A
18C1993-02	12:52	Sample Site 1	1.27	P [1]	A

1 = Notified Cornell 03/23/18, 0834

Stu Styles

Client Services Manager

18C1993
2/10

Clinical Laboratory of San Bernardino, Inc.
Chain of Custody

Client	Water Works Technology	System Number	Analysis Requested
Address	2415 South Westboro Avenue Alhambra, CA 91803	1909644	
Phone #	(909) 239-0087	Destination Laboratory	
Fax #	(626) 403-4121	[X] Clinical Laboratory	
Project	*Standard Analysis*	ECAP Compliance	
Sub Project	*AZUSA SPRINGS*	YES	
Comments		ELAP #	
Sampled by	*Oscar Cambero*	1088	

PRESENT / ABSENT

Date	Time	Sample Identification	Type Matr.	Field Temp C°	Free Chlorine	Total Chlorine		Comments
3/21/18	12:45	AZUSA SPRINGS WELL	W-1				X	
3/21/18	12:52	SAMPLE SITE #1	D-1		1.2 mg/L		X	

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (7) Cold (8) Other:

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, W-Well D- Dist.
Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	Oscar Cambero/ Waterworks Tech.	3/22/18 08:20		Bob Glaubke / LCSD

Comments:

Samples received: (✓) On ice (✓) Intact ( ) Custody seals Temp 10.4 ( )F (✓) C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [✓] Client [ ] Other

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

Celebrating 50 Years of Analytical Service 1967-2017

Client:	Water Works Technology 2415 South Westboro Avenue Alhambra CA, 91803	**Contact:**	Cornell Gillenwater
		Phone:	(909) 239-0087
		Fax:	(626) 403-4121
		System:	1909644
Project:	Standard Bacti Analysis		
Sub Project:	Azusa Springs		
Sampler:	Oscar Cambero		
Sampled:	03/30/18		
Received:	03/30/18 16:27		
Reported:	04/04/18		

RESULTS

Laboratory ID	Sample Time	Sample Location	Cl Res Free (Field) mg/L	Total Coliform P/A	E. Coli P/A
18C2592-01	10:45	Sample Site 4	1.27	A	A
18C2592-02	11:15	Sample Site 1	1.20	A	A
18C2592-03	11:20	Sample Site 3	1.05	A	A
18C2592-04	11:27	West Hydrant	1.31	A	A

Stu Styles

Client Services Manager

4-0-10

18C2592

Clinical Laboratory of San Bernardino, Inc.
Chain of Custody

Client	Water Works Technology	System Number	Analysis Requested
Address	2415 South Westboro Avenue Alhambra, CA 91803	1909644	
Phone #	(909) 239-0087	Des	
Fax #	(626) 403-4121	[X] Clinical Laboratory	
	Standard Analysis		
Sub Project	*AZUSA SPRINGS*	YES ELAP #	
Comments		1088	
Sampled by	Oscar Cambero		

Date	Time	Sample Identification	Type/ Matr.	Field Temp. °F	Free Chlorine	Total Chlorine	Present / Absent	Comments
3/30/18	10:45	SAMPLE SITE #4	D-1		1.2mg/L		X	
3/30/18	11:15	SAMPLE SITE #1	D-1		1.2mg/L		X	
3/30/18	11:20	SAMPLE SITE #3	D-1		1.0mg/L		X	
3/30/18	11:27	WEST HYDRANT	D-1		1.5mg/L		X	

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (7) Cold (8) Other:

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, W-Well D- Dist.
Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	Oscar Cambero/ Waterworks Tech.	3/30 16:27		CDS

Comments:

Samples received: ( ) On ice (X) Intact ( ) Custody seals Temp 7.4 ( )F (X)C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other _____

Page 1 of 1

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

Celebrating 50 Years of Analytical Service 1967-2017

Client:	Water Works Technology 2415 South Westboro Avenue Alhambra CA, 91803	**Contact:**	Cornell Gillenwater
		Phone:	(909) 239-0087
		Fax:	(626) 403-4121
		System:	1909644
Project:	Standard Bacti Analysis		
Sub Project:	Azusa Springs		
Sampler:	Oscar Cambero		
Sampled:	04/11/18		
Received:	04/11/18 15:46		
Reported:	04/17/18		

RESULTS

Laboratory ID	Sample Time	Sample Location	Cl Res Free (Field) mg/L	Total Coliform P/A	E. Coli P/A
18D1099-01	10:00	Azusa Springs Well		A	A
18D1099-02	10:00	Sample Site #4	1.20	A	A
18D1099-03	10:00	Sample Site #3	1.31	A	A
18D1099-04	10:00	Sample Site #1	1.24	P [1]	A
18D1099-05	10:00	West Hydrant	1.10	P [1]	A

1 = Notified Cornell 4/12/18, 1405

Stu Styles

Client Services Manager

Clinical Laboratory of San Bernardino, Inc.
Chain of Custody

18D1049

Client	Water Works Technology	System Number	Analysis Requested
Address	241 5 South Westboro Avenue Alhambra, CA 91803	1909644	PRESENT / NOT PRESENT
Phone #	(909) 239-0087	Description	
Fax #	(626) 403-4121	[X] Clinical Laboratory	
Project	*Standard Analysis*	COMP Compliance	
Sub Project	*AZUSA SPRINGS*	YES ELAP #	
Comments		1088	
Sampled by	*Oscar Cambero*		

Date	Time	Sample Identification	Type / Mat.	Field Temp C°	Free Chlorine	Total Chlorine		Comments
4/11/18	10:00AM	AZUSA SPRINGS WELL	W-1		—		X	
4/11/18	10:00AM	SAMPLE SITE #2	D-1		1.2mg/L		X	
4/11/18	10:00AM	SAMPLE SITE #3	D-1		1.3mg/L		X	
4/11/18	10:00AM	SAMPLE SITE #1	D-1		1.2mg/L		X	
[redacted]								
4/11/18	10:00AM	WEST HYDRANT	D-1		1.0mg/L		X	

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (7) Cold (8) Other:

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, W-Well D- Dist.
Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[redacted]	Oscar Cambero/ Waterworks Tech.	4-11-18 1546	[redacted]	[redacted]

Comments:

Samples received: (✓) On ice (✓) Intact ( ) Custody seals Temp 2.8 ( ) F (✓) C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other

Page 1 of 1

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

Celebrating 50 Years of Analytical Service 1967-2017

Client:	Water Works Technology 2415 South Westboro Avenue Alhambra CA, 91803	**Contact:**	Cornell Gillenwater
		Phone:	(909) 239-0087
		Fax:	(626) 403-4121
		System:	1909644
Project:	Standard Bacti Analysis		
Sub Project:	Azusa Springs		
Sampler:	Oscar Cambero		
Sampled:	04/14/18		
Received:	04/14/18 09:05		
Reported:	04/18/18		

RESULTS

Laboratory ID	Sample Time	Sample Location	Cl Res Free (Field) mg/L	Total Coliform P/A	E. Coli P/A
18D1252-01	7:30	Sample Site 1	1.20	A	A
18D1252-02	7:37	Sample Site 4	0.82	A	A
18D1252-03	7:40	West Hydrant	0.75	A	A
18D1252-04	7:50	Sample Site 3	1.05	A	A
18D1252-05	8:05	Site 5	0.67	A	A

Stu Styles

Client Services Manager

5/0/0 18-1252

Clinical Laboratory of San Bernardino, Inc.
Chain of Custody

Report To	Water Works Technology	System Number	Analysis Requested
Address	5415 South Westboro Avenue Alhambra, CA 91803	1909044	
Phone #	(909) 239-0087	Destination Laboratory	
Fax #	(626) 403-4121	[X] Clinical Laboratory	
Project	*Standard Analysis*	CDHP Compliance	
Sub Project	ANNSA SPRINGS	YES	
Comments		ELAP #	
Sampled by	*Oscar Cambero*	1088	

Date	Time	Sample Identification	Typ / Mat	Field Temp C°	Free Chlorine	Total Chlorine	Present	Absent	Comments
4/14/18	7:30	SAMPLE SITE #1	D-1		0.20		X		Call w/ Results (951) 609-8135 Oscar
4/14/18	7:37	SAMPLE SITE #4	D-1		0.82		X		
4/14/18	7:40	WEST HYDRANT	D-1		0.75		X		
4/14/18	7:50	SAMPLE SITE # 3	D-1		1.05		X		
4/14/18	8:05	SITE #5	D-1		0.69		X		

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (7) Cold (8) Other:

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, W-Well D- Dist.
Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	Oscar Cambero / WaterWorks	4/14/18 9:05		

Comments: _____

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 14.1 ( ) F ( ) C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other _____ Page 1 of 1

"Your Water and Wastewater Analysis Solution"

Clinical Laboratory of San Bernardino, Inc.

Celebrating 50 Years of Analytical Service 1967-2017

Client:	Water Works Technology 2415 South Westboro Avenue Alhambra CA, 91803	**Contact:**	Cornell Gillenwater
		Phone:	(909) 239-0087
		Fax:	(626) 403-4121
		System:	1909644
Project:	Standard Bacti Analysis		
Sub Project:	Azusa Springs		
Sampler:	Oscar Cambero		
Sampled:	04/16/18		
Received:	04/16/18 10:05		
Reported:	04/20/18		

RESULTS

Laboratory ID	Sample Time	Sample Location	Cl Res Free (Field) mg/L	Total Coliform P/A	E. Coli P/A
18D1329-01	8:03	Sample Site 4	2.04	A	A
18D1329-02	8:10	Sample Site 3	1.80	P [1]	A
18D1329-03	8:22	Sample Site 1	1.88	A	A
18D1329-04	8:35	West Hydrant	1.41	A	A

1 = Notified George C. 04/17/18, 1215

Stu Styles

Client Services Manager

Clinical Laboratory of San Bernardino, Inc.
Chain of Custody

1801329

Client:	Water Works Technology	System Number	Analysis Requested
Address	5415 South Westboro Avenue Alhambra, CA 91803	1909044	
Phone #	(909) 239-0087	Destination	
Fax #	(626) 403-4121	[X] Clinical Laboratory	
P.O.#	*Standard Analysis*	CDHP Compliance	
Sub Project	AZUSA SPRINGS	YES	
Comments		ELAP #	
Sampled by	*Oscar Cambero*	1088	

Date	Time	Sample Identification	Typ/ Mat	Field Temp C°	Free Chlorine	Total Chlorine	PRESENT / ABSENT	Comments
4/16/18	8:03am	SAMPLE SITE #4	D-1		2.04		X	
4/16/18	8:10am	SAMPLE SITE #3	D-1		1.86		X	
4/16/18	8:28	SAMPLE SITE #1	D-1		1.88		X	
4/16/18	8:35	WEST HYDRANT	D-1		1.41		X	

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO_3 (4) NH_4Cl (5) H_2SO_4 (6) Na_2SO_3 (7) Cold (8) Other:

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, W-Well D- Dist. Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
	Oscar Cambero / WaterWorks	4/16 10:05		CLSB

Comments:

Samples received: ( ) On ice (X) Intact ( ) Custody seals Temp 11.7 ( ) F (X) C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other

Page 1 of 1

Clinical Laboratory of San Bernardino, Inc.

Celebrating 50 Years of Analytical Service 1967-2017

Client:	Water Works Technology 2415 South Westboro Avenue Alhambra CA, 91803	**Contact:**	Cornell Gillenwater
		Phone:	(909) 239-0087
		Fax:	(626) 403-4121
		System:	1909644
Project:	Standard Bacti Analysis		
Sub Project:	Azusa Springs		
Sampler:	Oscar Cambero		
Sampled:	04/18/18		
Received:	04/19/18 08:15		
Reported:	04/27/18		

RESULTS

Laboratory ID	Sample Time	Sample Location	Cl Res Free (Field) mg/L	Total Coliform P/A	E. Coli P/A	Plate Count CFU/ml
18D1736-01	9:15	Sample Site 4	1.80	A	A	<1 [1]
18D1736-02	9:28	Sample Site 3	1.60	A	A	1 [1]
18D1736-03	9:40	Sample Site 1	1.82	A	A	6 [1]
18D1736-04	9:55	Sample Site 5	1.91	A	A	<1 [1]

1 = Analysis performed outside of recommended 8 hour hold time but within required 24 hour hold time.

Stu Styles

Client Services Manager

1804736

Clinical Laboratory of San Bernardino, Inc.
Chain of Custody

Client	Water Works Technology	System Number	1909644
Address	5415 South Westboro Avenue		
	Alhambra, CA 91803		
Phone #	(909) 239-0087	Destination	
Fax #	(626) 403-4121	[X] Clinical Laboratory	
Project	Standard Analysis	CDHS Compliance	
Sub Project	AZUSA SPRINGS	YES	
Comments		ELAP #	
Sampled by	Oscar Cambero	1088	

Analysis Requested: [illegible] Absent; HPC

Date	Time	Sample Identification	Typ/Mat	Field Temp C°	Free Chlorine	Total Chlorine	[illegible] Absent	HPC								Comments
4/18/18	9:15AM	SAMPLE SITE #4	D-1		1.80mg/L		X	X								
4/18/18	9:28AM	SAMPLE SITE #3	D-1		[illegible]		X	X								
4/18/18	9:40AM	SAMPLE SITE #1	D-1		1.82mg/L		X	X								
4/18/18	9:55AM	SAMPLE SITE #5	D-1		1.91mg/L		X	X								
~~4/18/18~~			~~D-1~~				~~X~~	~~X~~								

Preservatives: (1) $Na_2S_2O_3$ (2) HCl (3) HNO3 (4) NH4Cl (5) H2SO4 (6) Na2SO3 (7) Cold (8) Other

Matrix: DW-Drinking Water, WW-Waste Water, SW-Storm Water, GW- Ground Water, W-Well D- Dist.
Type- 1-Routine, 2-Repeat, 3-Replacement, 4-Special

Relinquished By (Sign)	Print Name / Company	Date / Time	Received By (Sign)	Print Name / Company
[signature]	Oscar Cambero / WaterWorks	4/18/18 0815	[signature]	CLSB

Comments:

Samples received: (X) On ice (X) Intact ( ) Custody seals Temp 7° ( ) F (X) C

Shipped Via [ ] Fed X [ ] Golden State [ ] UPS [ ] Client [ ] Other

Page 1 of 1

"Your Water and Wastewater Analysis Solution"

ENCLOSURE B

TIER 2 PUBLIC NOTIFICATION TEMPLATE

Instructions for Tier 2 Chemical or Radiological MCLs Notice Template

Template Attached

Since exceeding chemical or radiological maximum contaminant levels (MCLs) is a Tier 2 violation, you must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation [California Code of Regulations Title 22, Chapter 15, Section 64463.4(b)]. **Each water system required to give public notice must submit the notice to the State Water Resources Control Board, Division of Drinking Water (DDW) for approval prior to distribution or posting, unless otherwise directed by the DDW [64463(b)].**

Notification Methods

You must use the methods summarized in the table below to deliver the notice to consumers. If you mail, post, or hand deliver, print your notice on letterhead, if available.

If You Are a…	*You Must Notify Consumers by…*	*…and By One or More of the Following Methods to Reach Persons Not Likely to be Reached by the Previous Method…*
Community Water System [64463.4(c)(1)]	Mail or direct delivery [(a)]	Publication in a local newspaper
		Posting in conspicuous public places served by the water system or on the Internet [(b)]
		Delivery to community organizations
Non-Community Water System [64463.4(c)(2)]	Posting in conspicuous locations throughout the area served by the water system [(b)]	Publication in a local newspaper or newsletter distributed to customers
		Email message to employees or students
		Posting on the Internet or intranet [(b)]
		Direct delivery to each customer

(a) Notice must be distributed to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system.

(b) Notice must be posted in place for as long as the violation or occurrence continues, but in no case less than seven days.

The notice attached is appropriate for the methods described above. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects and notification language in italics unchanged. This language is mandatory [64465].

Multilingual Requirement

The notice must (1) be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the water

system and (2) include a telephone number or address where such individuals may contact the water system for assistance.

If any non-English-speaking group exceeds 1,000 persons served by the water system, but does not exceed 10 percent served, the notice must (1) include information in the appropriate language(s) regarding the importance of the notice and (2) contain the telephone number or address where such individuals may contact the water system to obtain a translated copy of the notice from the water system or assistance in the appropriate language.

Population Served

Make sure it is clear who is served by your water system -- you may need to list the areas you serve.

Corrective Action

In your notice, describe corrective actions you are taking. Do not use overly technical terminology when describing treatment methods. Listed below are some steps commonly taken by water systems with chemical or radiological violations. Use one or more of the following actions, if appropriate, or develop your own:

- "We are working with [local/state agency] to evaluate the water supply and researching options to correct the problem. These options may include treating the water to remove [contaminant] or connecting to [system]'s water supply."
- "We have stopped using the contaminated well. We have increased pumping from other wells, and we are investigating drilling a new well."
- "We will increase the frequency at which we test the water for [contaminant]."
- "We have since taken samples at this location and had them tested. They show that we meet the standards."

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to the DDW within ten days after you issue the notice [64469(d)]. You should also issue a follow-up notice in addition to meeting any repeat notice requirements the DDW sets.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.

It is a good idea to issue a "problem corrected" notice when the violation is resolved.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

[System] Has Levels of [Contaminant] Above the Drinking Water Standard

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we are doing to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Water sample results received on [date] showed [name of contaminant] levels of [level and units]. This is above the standard, or maximum contaminant level (MCL), of [standard and units].

What should I do?

- **You do not need to use an alternative water supply (e.g., bottled water).**
- This is not an immediate risk. If it had been, you would have been notified immediately. However, [Insert relevant health effects language from section 64465 appendix].
- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

[Describe corrective action]. We anticipate resolving the problem within [estimated time frame].

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [system].

State Water System ID#: _____. Date distributed: _____.

ENCLOSURE C

PROOF OF PUBLIC NOTIFICATION

PROOF OF NOTIFICATION

Name of Water System: Azusa Springs Water System

System Number: 1909644

Certification of Notification for Total Coliform Rule MCL & Monitoring Violations

As required by *California Code of Regulations,* Title 22, Section 64463.4, I notified the users of the water supplied by Azusa Springs Water System the violations of Total Coliform Rule. I complied with the requirement to conduct public notification as indicated below:

Required Action (indicate all that were used)	Date Completed
Public Notification – Hand Delivery	
Public Notification - Mail Delivery	
Public Notification – Continuous Posting	
Public Notification - Consumer Confidence Report	
Public Notification - Other method Specify other method used: _____	

_____ _____

Signature of Water System Representative Date

ATTACH A COPY OF THE NOTICE USED.

THIS FORM MUST BE COMPLETED AND RETURNED TO THE DIVISION

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

September 24, 2018

Ms. Deborah Enos
Deputy Executive Officer
Watershed Conservation Authority
Azusa Springs Water System
100 N. Old San Gabriel Canyon Road
Azusa, CA 91702

Dear Ms. Enos:

CITATION NO. 04_15_18C_002_1909644_36
MONITORING FAILURE OF SURFACE WATER TREATMENT RULE THROUGH FILTRATION AND DISINFECTION FOR JULY AND AUGUST 2018

Dear Mr. Enos:

Enclosed is Citation No. 04_15_18c_002_1909644_36 (hereinafter "Citation"), issued to the Azusa Springs Water System (hereinafter "ASWS"), public water system. Please note that there are legally enforceable deadlines associated with this Citation.

ASWS will be billed at the State Water Resources Control Board's (hereinafter "State Water Board"), hourly rate for the time spent on issuing this Citation. California Health and Safety Code (hereinafter "CHSC"), Section 116577, provides that a public water system must reimburse the State Water Board for actual costs incurred by the State Water Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation.

ASWS will receive a bill sent from the State Water Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on ASWS for the current fiscal year.

Any person who is aggrieved by a citation, order or decision issued by the Deputy Director of the Division of Drinking Water under Article 8 (commencing with CHSC, Section 116625) or Article 9 (commencing with CHSC, Section 116650), of the Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4), may file a petition with the State Water Board for reconsideration of the citation, order or decision. Appendix 1 to the enclosed Citation contains the relevant statutory provisions for filing a petition for reconsideration (CHSC, Section 116701).

Petitions must be received by the State Water Board within 30 days of the issuance of the citation, order or decision by the Deputy Director. The date of issuance is the date when the Division of Drinking Water mails a copy of the citation, order or decision. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day by 5:00 p.m.

Information regarding filing petitions may be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

If you have any questions regarding this matter, please contact Mr. Thomas Tsui of my staff at (818) 551-2036 or me at (818) 551-2016.

Sincerely,

Chi Diep, P.E.
District Engineer
Metropolitan District

Enclosures

Certified Mail No. 7012 3460 0002 3404 3999

STATE OF CALIFORNIA

WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

TO: Azusa Springs Water System
100 N. Old San Gabriel Canyon Road
Azusa, CA 91702

Attn: Deborah Enos, Deputy Executive Officer
Watershed Conservation Authority

CITATION FOR VIOLATION OF CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTIONS 64655 AND 64656 - WATER SYSTEM NO. 1909644

C I T A T I O N NO. 04-15-18C-002

Issued on September 24, 2018

Section 116650 of the California Health and Safety Code (hereinafter "CHSC") authorizes the issuance of a citation to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "State Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the Azusa Springs Water System (hereinafter "ASWS") for violation of California Code of Regulations (CCR), Title 22, Sections 64655 and 64656.

APPLICABLE AUTHORITIES

Section 116650 of California Health and Safety Code provides:

(a) If the State Board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the State Board may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.

(b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.

(c) A citation may specify a date for elimination or correction of the condition constituting the violation.

(d) A citation may include the assessment of a penalty as specified in subdivision (e).

(e) The State Board may assess a penalty in an amount not to exceed one thousand dollars ($1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

California Code of Regulations, Title 22, Sections 64655 and 64656 provide, in relevant part:

§64655. Filtration Monitoring.

(a) To determine compliance with the performance standards specified in section 64653 and the operating criteria in section 64660, a supplier shall conduct turbidity monitoring in accordance with table 64655. Monitoring shall be conducted when the treatment plant is in operation and pursuant to the operations plan required by section 64661.

§64656. Disinfection Monitoring.

(a) To determine compliance with disinfection inactivation requirements specified in section 64654(a), a supplier shall develop and conduct a monitoring program to measure those parameters that affect the performance of the disinfection process. This shall include but not be limited to the temperature of the disinfected water, the pH(s) of the disinfected water if chlorine is used as a disinfectant, the disinfectant contact time(s) and the residual disinfectant concentration(s) before or at the first customer. The monitoring program shall be described in the operations plan required by section 64661.

STATEMENT OF FACTS

The legal owner of ASWS is Watershed Conservation Authority (WCA). WCA contracted Waterworks Technology Inc. (WTI) to operate ASWS. ASWS is operated under Water Supply Permit No. 131018-1909644, issued on October 31, 2013.

ASWS is a Transient Non-Community water system and serves approximately 25 persons and maintains 4 service connections within its boundaries. ASWS produces groundwater from the Well 1 which is classified as groundwater under the direct influence of surface water (GWUDI).

ASWS operates a surface water treatment plant which utilizes Alternative Direct Filtration technology and treats raw water from Well 1. ASWS also utilizes liquid sodium hypochlorite solution at Well 1 and at Water Treatment Plant effluent. In addition, ASWS has two storage tanks to provide disinfection contact time.

In the Water Supply Permit No. 131018-1909644, Provision No. 19 states that ASWS shall submit a monthly operation report to the Division by the 10th day of the following month. The report shall include the daily turbidity measurements for raw water and treated water, chlorine residual measurements of the treated water, contact time (CT) calculations, and a log of turbidimeter calibrations, a list of water quality complaints and reports of water borne illness received from consumers. Treatment plant records shall be maintained for at least five years.

On August 19, 2018, around 10:52 pm, Mr. George Cambero, Operator of WTI, submitted the July Monthly Water Quality Report (Repot) via e-mail to the Division. In the Report, ASWS notified the Division that electrical power surge damaged the sensitive electronic equipment in ASWS and all analyzers have sustained considerable damaged and are no longer providing any readings at all. There were no turbidity and chlorine residual readings being provided in the Report.

On August 20, 2018, around 2 pm, the Division contacted Mr. George Cambero and notified him that ASWS is in violation of Surface Water Treatment Rule (SWTR) by not collecting turbidity and chlorine residual samples. Later in the afternoon, the Division issued a Boil Water Notice (BWN) and requested ASWS to post or delivery the BWN to all the consumers within ASWS' service boundary.

On August 22, 2018, around 2:19 pm, Ms. Deborah Enos, Deputy Executive Officer of WCA, notified the Division that the WBN had been posted on August 20, 2018. In the meantime, bottle water will be provided to ASWS' residents.

DETERMINATION

SWTR MONITORING VIOLATIONS

A supplier shall comply with the filtration monitoring and disinfection monitoring as established in Sections 64655 and 64656 of Title 22, CCR. More specifically, Section 64655 provides the filtration monitoring compliance for direct filtration treatment and serves fewer than 10,000 persons and Section 64656 provides the disinfection monitoring compliance for direct filtration treatment and serves less than or equal to 500 persons.

Based on the above Statement of Facts, the Division has determined that ASWS has violated Section 116555 of the CHSC and Sections 64655 and 64656 of the Title 22, CCR. Specifically, during the period of July 1 to August 20, 2018, ASWS delivered water that did not meet the SWTR. There were no turbidity and chlorine residual readings being reported. On August 20, 2018, ASWS posted or delivered BWN to its consumers. Until ASWS received written notice from the Division stated that ASWS is back into compliance, ASWS shall continue to post or deliver BWN to its consumers every three months as long as the violation continues. On or before October 30, 2018, ASWS shall submit a Corrective Action Plan identifying improvements to the water system and/or operational change designed to correct the water quality problem.

DIRECTIVES

ASWS is hereby directed to take the following actions:

1. On or before October 30, 2018, notify persons served by ASWS about the SWTR monitoring violations as per Section 64463.4 of Title 22, CCR. ASWS shall deliver the notice to water users by mail or direct delivery. A template of Tier 2 Public Notice is provided in Attachment 1. In addition, ASWS shall use one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery: 1) publication in a campus newspaper; 2) posting in conspicuous public places or on the internet; or 3) delivery to community organizations. ASWS shall repeat the notice every three months as long as the violation continues. The notification must be approved by the Division prior to dissemination.
2. On or before October 30, 2018, submit a certificate to the Division that it has done so using the form provided in Attachment 2.
3. On or before October 30, 2018, submit a Corrective Action Plan identifying improvements to the water system and/or operational change designed to correct the water quality problem (violations of the SWTR).

The Division reserves the right to make such modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation, and shall be deemed effective upon issuance.

Nothing in this Citation relieves ASWS of its obligation to meet the requirements of the California Safe Drinking Water Act, or of any regulation, permit, standard, or order issued or adopted thereunder.

All submittals required by this Citation shall be submitted to the Division at the following address:

Chi Diep, P.E.
District Engineer
State Water Resources Control Board
Division of Drinking Water
Region4@waterboards.ca.gov

PARTIES BOUND

This Citation shall apply to and be binding upon ASWS, its officers, directors, shareholders, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The Directives of this Citation are severable, and ASWS shall comply with each and every provision thereof, notwithstanding the effectiveness of any other provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Division to: issue citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any permit, regulation, permit or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the Division to take action to suspend or revoke a permit that has been issued to a public water system if the system has violated applicable law or regulations or has failed to comply with an order of the Division; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with violates an order of the Division. The Division does not waive any further enforcement action by issuance of this citation.

September 24, 2018
Date

Chi Diep, P.E.,
District Engineer
Division of Drinking Water
State Water Resources Control Board

Attachments:

1. Tier 2 Public Notice template
2. Proof of Notification Form

Attachment No. 1

Tier 2 Public Notice Template

Instructions for Tier 2 SWTR Failure to Filter Notice Template

Template Attached

Since surface water treatment technique violations are included in Tier 2, you must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation [California Code of Regulations, Title 22, Chapter 15, Section 64463.4(b)]. **Each water system required to give public notice must submit the notice to the State Water Resources Control Board, Division of Drinking Water (DDW) for approval prior to distribution or posting, unless otherwise directed by the DDW [64463(b)].**

Notification Methods

You must use the methods summarized in the table below to deliver the notice to consumers. If you mail, post, or hand deliver, print your notice on letterhead, if available.

If You Are a…	*You Must Notify Consumers by…*	*…and By One or More of the Following Methods to Reach Persons Not Likely to be Reached by the Previous Method…*
Community Water System [64463.4(c)(1)]	Mail or direct delivery (a)	Publication in a local newspaper
		Posting (b) in conspicuous public places served by the water system or on the Internet
		Delivery to community organizations
Non-Community Water System [64463.4(c)(2)]	Posting in conspicuous locations throughout the area served by the water system (b)	Publication in a local newspaper or newsletter distributed to customers
		Email message to employees or students
		Posting (b) on the Internet or intranet
		Direct delivery to each customer

(a) Notice must be distributed to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system.

(b) Notice must be posted in place for as long as the violation or occurrence continues, but in no case less than seven days.

The notice attached is appropriate for the methods described above. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects and notification language in italics unchanged. This language is mandatory [64465].

Multilingual Requirement

The notice must (1) be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the water

system and (2) include a telephone number or address where such individuals may contact the water system for assistance.

If any non-English-speaking group exceeds 1,000 persons served by the water system, but does not exceed 10 percent served, the notice must (1) include information in the appropriate language(s) regarding the importance of the notice and (2) contain the telephone number or address where such individuals may contact the water system to obtain a translated copy of the notice from the water system or assistance in the appropriate language.

Population Served

Make sure it is clear who is served by your water system -- you may need to list the areas you serve.

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with surface water treatment technique violations. Use one or more of the following actions, if appropriate, or develop your own:

- "Our filtration system needs upgrades to meet the requirements."
- "We are installing filtration. We expect that the filtration system will be operational by [month, year]."
- "We are monitoring for turbidity (cloudiness), disinfectant levels, and the presence of bacteria. We continue to meet the standards for these measurements."

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to the DDW within ten days after you issue the notice [64469(d)]. You should also issue a follow-up notice in addition to meeting any repeat notice requirements the DDW sets.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.

It is a good idea to issue a "problem corrected" notice when the violation is resolved.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

[System]
Does Not Meet Treatment Requirement (Filtration)

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we are doing to correct this situation.

On [date], the State Water Resources Control Board, Division of Drinking Water (DDW) ordered us to filter the water in addition to disinfecting. We are required to install this filtration because we do not have an adequate watershed control program in place. However, we have not yet installed a filtration system.

What should I do?

- **You do not need to boil your water or take other actions.**
- This is not an emergency. If it had been, you would have been notified immediately. We do not know of any cases of contamination. However, until improvements are made, there is an increased chance that disease-causing organisms could contaminate the water supply.
- *Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.* These symptoms, however, are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- A home filter will not necessarily solve the problem, because not all home filters protect against parasites. For information on appropriate filters, call NSF International at 1(800) 673-6275, the Water Quality Association at (630) 505-0160, or the State Water Resources Control Board's, Residential Water Treatment Device Registration Unit at (916) 449-5600 or visit the State Board's website atwww.swrcb.ca.gov.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from U.S. EPA's Safe Drinking Water Hotline at 1(800) 426-4791.
- If you have other health issues concerning the consumption of the water, you may wish to consult your doctor.

What happened? What is being done?

Filtration is the best method for removing these organisms. [Describe corrective action]. We anticipate resolving the problem within [estimated time frame]. Until filtration is installed, you will receive a notice similar to this every three months.

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [system].

State Water System ID#: _____. Date distributed: _____.

Instructions for Tier 2 SWTR Disinfection Treatment Notice Template

Template Attached

Since surface water treatment disinfection treatment technique violations are included in Tier 2, you must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation [California Code of Regulations, Title 22, Chapter 15, Section 64463.4(b)]. Some disinfection problems may be serious. **Each water system required to give public notice must submit the notice to the State Water Resources Control Board, Division of Drinking Water (DDW) for approval prior to distribution or posting, unless otherwise directed by the DDW [64463(b)].**

Notification Methods

You must use the methods summarized in the table below to deliver the notice to consumers. If you mail, post, or hand deliver, print your notice on letterhead, if available.

If You Are a…	*You Must Notify Consumers by…*	*…and By One or More of the Following Methods to Reach Persons Not Likely to be Reached by the Previous Method…*
Community Water System [64463.4(c)(1)]	Mail or direct delivery [(a)]	Publication in a local newspaper
		Posting [(b)] in conspicuous public places served by the water system or on the Internet
		Delivery to community organizations
Non-Community Water System [64463.4(c)(2)]	Posting in conspicuous locations throughout the area served by the water system [(b)]	Publication in a local newspaper or newsletter distributed to customers
		Email message to employees or students
		Posting [(b)] on the Internet or intranet
		Direct delivery to each customer

(a) Notice must be distributed to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system.

(b) Notice must be posted in place for as long as the violation or occurrence continues, but in no case less than seven days.

The notice attached is appropriate for the methods described above. However, you may wish to modify it before using it for posting in public places served by the water system. If you do, you must still include all the required elements and leave the health effects and notification language in italics unchanged. This language is mandatory [64465].

Multilingual Requirement

The notice must (1) be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the water system and (2) include a telephone number or address where such individuals may contact the water system for assistance.

If any non-English-speaking group exceeds 1,000 persons served by the water system, but does not exceed 10 percent served, the notice must (1) include information in the appropriate language(s) regarding the importance of the notice and (2) contain the telephone number or address where such individuals may contact the water system to obtain a translated copy of the notice from the water system or assistance in the appropriate language.

Population Served

Make sure it is clear who is served by your water system -- you may need to list the areas you serve.

Description of the Violation

Choose from the following descriptions of violations and modify to fit your situation.

- *Contact Time* – "In order to ensure proper disinfection, water in the treatment plant must be in contact with chlorine or a similar disinfectant for a minimum amount of time. On [date], this did not occur. Although chlorine quickly kills most bacteria, it is less effective against organisms such as viruses and parasites. For this reason, water needs to mix with chlorine for a longer time period to kill such organisms. The amount of time necessary, or the "contact time", depends on the amount of disinfectant in the water and the temperature of the water."

- *Disinfectant Residual* – "We routinely monitor for disinfectant residual in the distribution system. This measurement tells us whether we are effectively disinfecting the water supply. Disinfectant residual is the amount of chlorine or related disinfectant present in the pipes of the distribution system. If the amount of disinfectant is too low, organisms could grow in the pipes."

    - *Monthly Exceedance (Distribution System)* – "During the month of [month], disinfectant residual was undetected in more than 5% of samples. The standard is that disinfectant may be undetectable in no more than 5% of samples taken each month."

    - *Single Exceedance (Entry to the Distribution System)* – "On [date], disinfectant levels dropped below 0.2 milligrams per liter (mg/L) for [number] hours. The standard is that levels may not drop below 0.2 mg/L for more than four hours."

Corrective Action

In your notice, describe corrective actions you are taking. Listed below are some steps commonly taken by water systems with disinfection treatment technique violations. Use one or more of the following actions, if appropriate, or develop your own:

- "We are sampling/we sampled both untreated and treated water for the presence of coliform bacteria."
- "We are sampling/we sampled disinfectant levels and will adjust/adjusted the amount of disinfectant added as necessary to maintain adequate levels."

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to the DDW within ten days after you issue the notice [64469(d)]. You should also issue a follow-up notice in addition to meeting any repeat notice requirements the DDW sets.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.

It is a good idea to issue a "problem corrected" notice when the violation is resolved.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

[System]
Did Not Meet Treatment Requirement (Disinfection)

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what you should do, what happened, and what we are doing to correct this situation.

[Describe the violation - use descriptions from instructions].

What should I do?

- **You do not need to boil your water or take other actions.**
- This is not an emergency. If it had been, you would have been notified immediately. Tests taken during this same time period did not indicate the presence of bacteria in the water.
- *Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.* These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from U.S. EPA's Safe Drinking Water Hotline at 1(800) 426-4791.
- If you have other health issues concerning the consumption of this water, you may wish to consult with your doctor.

What happened? What is being done?

[Describe corrective action]. [Disinfectant residual levels/contact times] so far this month have met all requirements.

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [system].

State Water System ID#: _____. Date distributed: _____.

Attachment No. 2

Proof of Notification Form

PROOF OF NOTIFICATION

Name of Water System: Azusa Springs Water System

System Number: 1909644

Certification of Notification for Surface Water Treatment Rule Monitoring Violations

As required by *California Code of Regulations,* Title 22, Section 64463.7, I notified the users of the water supplied by Azusa Springs Water System violated filtration monitoring and disinfection monitoring of Surface Water Treatment Rule in Sections 64655 and 64656, Title 22, *California Code of Regulations*. I complied with the requirement to conduct public notification as indicated below:

Required Action (indicate all that were used)	Date Completed
Public Notification – Hand Delivery	
Public Notification - Mail Delivery	
Public Notification – Continuous Posting	
Public Notification - Consumer Confidence Report	
Public Notification - Other method Specify other method used: _____	

_____ _____

Signature of Water System Representative Date

ATTACH A COPY OF THE NOTICE USED.

THIS FORM MUST BE COMPLETED AND RETURNED TO THE DIVISION

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

GARCIA, SALIAN
AZUSA SPRINGS WATER SYSTEM
100 N OLD SAN GABRIEL RD
AZUSA, CA 91702

Date: 09/28/2018

System No.: 1909644
Invoice No.: EW-1018126

Water System Enforcement Fees - 07/01/2017 - 06/30/2018

Payment must be received within 90 days from the date of this invoice or a penalty may be assessed.

LINE ITEMS	HOURS	FEES
ENFORCEMENT ACTIVITIES	8.00	1,408.00
TOTAL:	**8.00**	**1,408.00**

The hourly rate is $176 per hour

FY 2017/18 ENFORCEMENT BILLING (07/01/2017 - 06/30/2018)

INVOICE NUMBER: **EW-1018126**
SYSTEM NUMBER: **1909644**
(Please print the above numbers on check or money order)

AMOUNT DUE: **$1,408.00**
DUE DATE: **12/27/2018**
DISTRICT: **15**

PLEASE REMIT PAYMENT TO:

SWRCB Accounting Office
ATTN: Drinking Water Program Fees
P.O. Box 1888
Sacramento, CA 95812-1888

Invoicing Date: September 28, 2018

GARCIA, SALIAN
AZUSA SPRINGS WATER SYSTEM
100 N OLD SAN GABRIEL RD
AZUSA, CA 91702

For questions or address or contact changes, please call Chi P. Diep at 818-551-2016

WATER TREATMENT PLANT OPERATIONS PLAN and TECHNICAL REPORT

AZUSA SPRINGS WATER SYSTEM WATERSHED CONSERVATION AUTHORITY EL CANTO AZUSA RIVER WILDERNESS PARK

State of California Water System Number 1909644

Located in
Azusa, CA

Published: May 31, 2011

Prepared By:

WREA

5/31/11

Water Resource Engineering Associates
2300 Alessandro Drive, Suite 215 • Ventura, California 93001
805.653.7900 • Fax: 805.653.0610
1-800-25-WATER • www.wreassoc.net

2353-Ops Desc.DOC

AZUSA SPRINGS
WATERSHED CONSERVATION AUTHORITY
EL ENCANTO AZUSA RIVER WILDERNESS PARK
WATER TREATMENT PLANT OPERATIONS PLAN AND TECHNICAL REPORT
Los Angeles County, CA

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AZUSA SPRINGS
WATERSHED CONSERVATION AUTHORITY
EL ENCANTO AZUSA RIVER WILDERNESS PARK
WATER TREATMENT PLANT OPERATIONS PLAN AND TECHNICAL REPORT
Los Angeles County, CA

SECTION 1 DESCRIPTION OF FACILITIES

A. Background

The Watershed Conservation Authority (WCA) has proposed creation of Azusa River Wilderness Park (also known as El Encanto Azusa River Wilderness Park) for use as parkland and WCA offices. The site is along Highway 39 in San Gabriel Canyon near the northern boundary of the City of Azusa, CA.

The WCA occupies the site of the former El Encanto Restaurant. The Azusa Springs Water System, State System Number 1909644, is currently operating under a permit issued by the Los Angeles County Environmental Health Department. The current system configuration produces disinfected, filtered water. Present facilities include one water supply well, (Number 921-4623), with chlorine injection facilities, a pressure filter, two water storage tanks totaling 20,000-gallons and distribution pipelines. The Los Angeles Department of Public Health has cited Azusa Springs multiple times for failure to collect monthly bacteriological samples from the distribution system.

B. Brief Description of the System

A pressure filtration unit classified as Alternative Technology with a continuous capacity range of 2.4 Gal/Sq.Ft. to 12 Gal/Sq.Ft., or 20 to 98 GPM will be installed and operated at the facility. Normal system production will be 20 GPM. System storage capacity is 20,000-gallons comprised of two 10,000-gallon finished water storage tanks.

The filter station includes two pressure vessel media filters, First and Second Stage, with graded garnet sand, coagulant injection, static mixer, associated instrumentation, controls, alarms and electrical.

Raw water will be chlorinated at the well head as it is pumped uphill through the filter system and the two water storage tanks. At the filter, the water will be injected with a polymer coagulant before passing through a static mixer and the filter. An additional chlorine injection pump and chlorine storage will be connected downstream of the filter. Turbidimeters, chlorine analyzers, recording equipment, and all other instrumentation will be located with the filter, which will be located within a locked, ventilated industrial enclosure.

C. Water Supply Well Number 921-4623, (State Well No. 001-01N / 10W-23E04s)

The Azusa Springs Water System water supply well was developed in 1962 to a depth of 78-feet with an 8-inch steel casing. The well is currently equipped with a submersible pump that produces 20 GPM. The well is within 20-feet of the bank of

the San Gabriel River and thus, is classified as groundwater under the influence of surface water.

D. Transmission Facilities

The current raw water pipeline from the well to the filter is a 2-inch, steel pipeline. The exact location is unknown. However, site investigations have identified specific locations on either side of the river bank, at the filter, and at the storage tanks.

E. Treatment Facilities

System treatment facilities include a two-stage permanent, graded media pressure filter by EPD, coagulation by polymer injection, and disinfection by chlorine injection. Chlorinated water is pumped from the well through two pressure vessels and into two elevated 10,000-gallon storage tanks. Raw water turbidity will be monitored prior to the filters by a Hach Mfg. 1720 E continuous reading turbidimeter. Turbidimeter readings are recorded at the PLC. Each filter unit has a surface area of 8.2 SQ. FT. Based on the design filtration rate of 2.4 GPM/SQ. FT., the normal design capacity of the plant is 20 GPM or approximately 28,800 GPD. The EPD filter is approved to treat up to 6 NTU at 12 GPM/SQ. FT or up to 20 NTU @ 5 GPM/SQ. FT. by the State of California Department of Health Services, California Surface Water Treatment Alternative Filtration Technology Demonstration Report.

Each filter effluent is monitored by individual Hach 1720 continuous-reading turbidimeter and recorded to the PLC.

Chlorine is injected at the well before the water is pumped to the treatment facilities. The disinfection system consists of one liquid chlorine metering pump and a liquid chlorine storage vat at the well. The disinfection system starts automatically when the well water pump turns on. And additional storage vat and metering pump will be installed to inject chlorine downstream of the filter.

F. Storage and Distribution

The finished, filtered water will flow uphill to two 10,000-gallon storage tanks. The two tanks are interconnected for a total of 20,000-gallons. The water enters the tank(s) through a 2-inch overhead connection.

The existing distribution system is comprised 2-inch diameter steel pipe. Reportedly, there have been no significant additions constructed.

AZUSA SPRINGS
WATERSHED CONSERVATION AUTHORITY
EL ENCANTO AZUSA RIVER WILDERNESS PARK
WATER TREATMENT PLANT OPERATIONS PLAN AND TECHNICAL REPORT
Los Angeles County, CA

SECTION 2 TREATMENT PLANT STAFFING

A. Operations Staff

Operations and maintenance of Azusa Springs water system is performed by personnel of Waterworks Technology, Inc. (WTI), a Grade D3, T4 State certified water operator. WTI employs a full time staff of certified operators, maintenance workers, and electrical/mechanical technicians. Work scheduling and supervision is provided by the Water System Specialist and the Operations Supervisor, employed by the Operator.

The Operator has an established Emergency Response Program with personnel assigned to respond to after hour emergencies.

B. Staffing

All certified operators are supervised by WTI and the Operations Supervisor.

SECTION 3 PERFORMANCE MONITORING PROGRAM

A. Monitoring Points

Performance of the treatment process is monitored by continuous reading analyzers. Raw water and combined filter effluent turbidity analyzers and all other analyzers including residual chlorine, , flow meter and recycle pump run time are connected to a continuous data logger within the PLC. Operating conditions analyzed and recorded are as follows:

- Raw Water Turbidity
- Raw Water Total Coliform Bacteria
- Either Fecal Coliform Bacteria or E. Coli Bacteria
- First Stage Turbidity
- Combined Filter Effluent Turbidity
- Free Chlorine Residual
- Recycled Water Turbidity
- Recycle Pump run-time
- Station Flow
- pH/Temperature (Grab Sample)

Review of analyzer logs and inspection of facilities is performed by members of the Operation's Staff every 2-3 hours daily, between 7 AM – 4 PM.

Sample points include raw water influent, first stage filter effluent, combined filter effluent, recycled water, and finished water. The analyses to be run are turbidity, disinfectant residuals, temperature, pH, hardness, taste, odor, and color. The analyses need to be performed at the plant a minimum four times daily. The intervals are outlined on the daily laboratory form and should be done not less than one-and-a-half-hours (1.5 hours) apart, ideally at least two hours apart during the operators' regular shift.

A listing of analytical instrumentation used to monitor treatment plant performance and instrument operation instructions is included at the end of this section.

B. Treatment Chemicals

Liquid chlorine sodium hypochlorite solution is used for disinfection purposes.
Aqueous Aluminum Sulfate is used for coagulation purposes.
No other chemicals are used.

C. Analytical Instrumentation

The following table lists data on the analyzing instruments that are used at the Azusa Springs Treatment Plant.

SAMPLE	TYPE	SAMPLE LOCATION	ANALYZER LOCATION	ANALYZER TYPE
N.T.U	Raw Water (Continuous)	Raw Water Line	Plant Enclosure	Hach Company Turbidimeter Model 1720-C
N.T.U	First Stage Effluent (Continuous)	After Filter No.1	Plant Enclosure	Hach Company Turbidimeter Model 1720-C
N.T.U	Combined Filter Effluent (Continuous)	After Filter No.2	Plant Enclosure	Hach Company Turbidimeter Model 1720-C
CL	Free Residual	Station Outlet Finished Water Line	Plant Enclosure	Hach Company CL Analyzer Model CL 17
pH/Temp	Distribution System	Distribution Sample Station	Portable Grab Sample	Hand Held
CL	Free Residual	Distribution Sample Station	Portable Grab Sample	Hand Held
N.T.U.	Recycle Backwash	Backwash Tank	Portable Grab Sample	Hand Held

D. Initial Analyzer Setpoints

Raw water High Turbidity Alarm / well pump shutdown	20 NTU
First Stage Filter High Turbidity Alarm	1.0 NTU
Second Stage Filter (CFE) High Turbidity Alarm	0.2 NTU
Chlorine residual low level / well pump shutdown	1.8 mg/l

Analyzer setpoints will be evaluated and modified if required after start-up.

E. Turbidimeter Operation and Calibration

Instrument Operation

Once the turbidimeters are on line and normal operations are defined, operator requirements are limited to periodic calibration and standardization checks, and maintaining peripheral equipment such as a data logger. Also, any system warnings should be investigated promptly to avoid a more serious malfunction. The operator should monitor the control unit indicators frequently to be aware of any abnormalities.

NTU Indicator

During normal operation, the green NTU LED will be lit - indicating the digital display represents turbidity. A flashing light will occur if the alarms are locked out.

Digital Display

The digital readout will indicate the turbidity level of the sample in nephelometric turbidity units during normal operation. The turbidity reading will be interrupted only when the keyboard is used to enter or recall some other function. When that is done, the NTU indicator light will go out. If sample turbidity is above 100 NTU, the display will show 100.0 flashing on and off.

Alarms 1 and 2 Indicators

The alarm LEDS will be lit when the programmed alarm set points have been exceeded. If turbidity is within the set point limits, they will be off. An alarm condition may or may not require action by the operator, depending on how the alarm circuits are used. Alarm indicators will go off automatically if turbidity returns to within the set point limits. All alarms will be reported to the PLC and operator interface.

System Warning Indicator

A system warning light indicates a minor malfunction may have occurred and should be investigated. The display continues to indicate sample turbidity. By entering 10 DIAG, an error code indicating the cause of the malfunction will be displayed.

System Alarm Indicator

The system alarm indicator lights when a malfunction has prevented instrument operation. The operator must investigate the cause of the malfunction and take corrective action to restore operation. An error code indicating the cause of the alarm will be displayed by entering 11 DIAG.

Calibration
The Model 1720 Turbidimeter is factory-calibrated before shipment. Recalibration is required after any significant maintenance or repair and at least once every three months of normal operation. A standardization check should be performed on a monthly basis and may indicate the need for recalibration. There are two calibration methods: the ICE-PIC Calibration/Verification Module and the comparison method. Use of the Calibration/Verification Module method is strongly recommended for greatest calibration accuracy and ease of use.

Calibration shall be performed in accordance with the Hach 1720E Turbidimeter User's Manual.

During verification, the ICE-PIC Module reduces light from the instrument source and directs it to the instrument photocell. The proprietary design allows detected light to be set to a given NTU value, base on direct comparison to USEPA-accepted Formazin primary standards. Typical performance verifications can be completed in about one minute without instrument interruptions.

Standardization Checks
Monthly standardization checks should be performed by analyzing a grab sample with a properly calibrated laboratory turbidimeter.

F. Chlorine Analyzer Operation and Calibration

Instrument Observation
Once the instrument is installed on line, operator requirements are limited to replenishing buffer and indicator reagents at approximately one-month intervals and cleaning the sample cell when needed. The instrument is designed to function operator-free for a minimum of a month. However, a periodic visual check is good practice in order to become aware of any problem and investigate it promptly.

Mg/L Chlorine Indicator Light
During normal operation, this indicator light should be on continuously, indicating that the display is reading chlorine. A flashing light is an indication the alarms are locked out.

Digital Display

The digital readout will indicate the chlorine concentration of the sample in mg/L chlorine during normal operation. The concentration reading will be interrupted only when the keyboard is used to enter or recall some other function. When that is done, the mg/L chlorine indicator goes out. If the chlorine concentration is above 5 mg/L, the display flashes on and off.

Alarms 1 and 2 Indicators
These LEDs will be out unless the programmed alarm set point has been exceeded. An alarm condition may or may not require action from the operator, depending on how the alarm circuits are used. The alarm indicator goes out automatically when the alarm condition disappears. All alarms are reported to the PLC and operator interface.

System Alarm Indicator
This indicator lights when a malfunction has caused the analyzer to shut down. The operator must investigate the cause of the malfunction and take decisive action to correct the problem. By entering 11 DIAG, an error code indicating the cause of the malfunction will be displayed.

System Warning Indicator
A system warning light indicates a minor malfunction has occurred and should be investigated. The analyzer continues to run. By entering 10 DIAG, an error code indicating the cause of the malfunction will be displayed.

Hydraulic System
A visual check of the hydraulic components can detect leaks in the plumbing, tubing fatigue in the pump/valve module, a reagent straw not drawing from the bottom of the bottle or a low reagent supply. Early discovery and correction of any of these conditions will ensure reliable performance of the analyzer.

Calibration Requirements
Calibration of the CL17 Chlorine Analyzer is not necessary on a regular basis. The optical absorbance curve of the DPD chemistry with respect to chlorine concentration is well established and consistent. By measuring the sample blank absorbance with each measurement to provide an automatic zero reference, the accuracy of analyzer calibration is maintained.

There are two methods for checking analyzer calibration: introducing known standards to the analyzer in place of the normal sample or comparing the analyzer reading on the sample to the results with a reliable laboratory analysis. In either case, the CL17 can be recalibrated to agree with the correct value. Calibration shall be performed in accordance with the Hach CL17 User's Manual.

G. Chlorine Contact Time (CT) Calculation

CT must be logged and determined using data collected from field samples. Samples include Free Chlorine Residual, pH and temperature. Using historic data, the following CT calculation is provided as a guideline:

Calculation for CT 1 log inactivation for Giardia Lamblia Cysts:
Total Pipeline Volume, 2.067" ID, 508 L.F.: 139 gallons.
Short-Circuiting factor for Transmission Lines = 1
Total Stored Volume: 20,000
Short-Circuiting Factor for Clearwell(S) = 0.10
Peak Demand Outflow = 30 GPM (estimated)
Free Chlorine Residual Required: 1.8 mg/l
139 + (20,000 x 0.10) / 30 = 71 Minutes
71 x 1.8 = 127
CT Value is 127
CT Value for 1 log inactivation for pH 7.5 @ 10° C = 41

SECTION 4 UNIT PROCESS EQUIPMENT MAINTENANCE PROGRAM

A. Storage Level Control

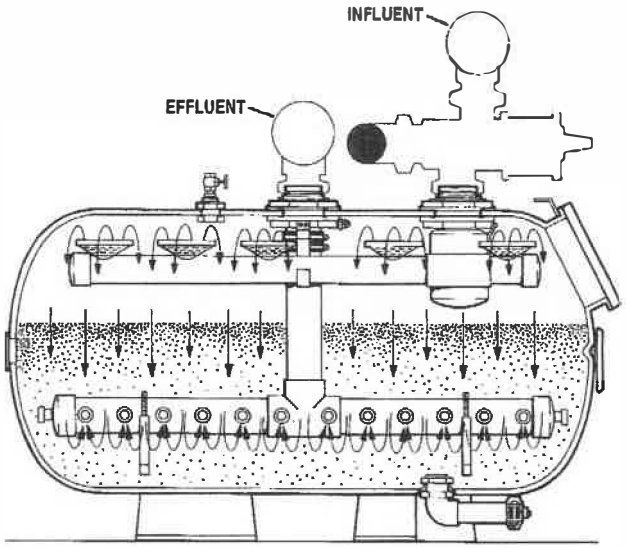
The storage tank water level is controlled by a pressure / level transducer and is transmitted to the treatment facilities via communication cables. The signal is processed by a programmable logic controller mounted in the plant control center, and is identified as the PLC. The PLC controls signals the start/stop of the well pump.

As the water level in the storage tanks lowers to the programmed level setpoint (P_1 ON), the PLC will call the well pump and begin pumping. The well pump will turn off when the full tank level setpoint is reached, (P_1 OFF).

B. Filter Operation

Influent water is directed into the filter vessel through a hydraulically balanced distributor. Filtration is achieved through balanced hydraulic flow, resulting in low differential pressure losses through the filter. Water turbulence is reduced to very low limits, and flow paths at the media surface are almost wholly parallel and vertical. Flow rates in excess of 20 gpm/sq.ft. of filter area can be achieved without channeling the media bed. At high flow rates, collected solids are forced into the media, but selection of small media enables excellent filtration to be achieved. The

lower collection system receives water through "V" slotted laterals, which retain very fine filter media. The filtered water exits via the effluent tank port.

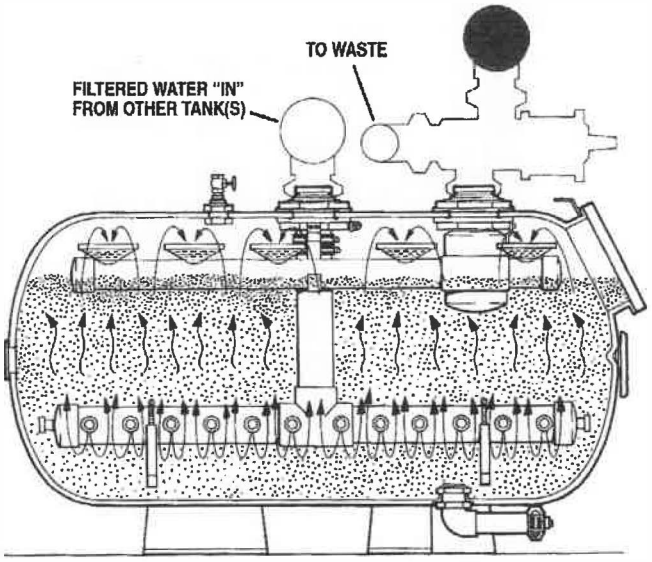


Flow diagram of tank in filtration

C. Filter Cleaning (Backwashing)

Backwashing is a reversal through the filter tank. The backwash valve being activated, routes water from the storage tanks through the underdrain collection system of the filter tank to be backwashed. This reversal of flow direction fluidizes the media bed, causing the release of collected solids. Circulation patterns are established to progressively present each particle of the media at the surface on approximately 30-second cycles. The balanced flow conditions, induced by the collection system, reduces water velocity to below that of the settling rate, preventing loss of filter media during this phase of operation. The unwanted solids, which are released from the media bed, are collected by influent diverter and are discharged out of the tank to the waste line piping.

AZUSA SPRINGS
WATERSHED CONSERVATION AUTHORITY
EL ENCANTO AZUSA RIVER WILDERNESS PARK
WATER TREATMENT PLANT OPERATIONS PLAN AND TECHNICAL REPORT
Los Angeles County, CA



Flow diagram of tank in filtration

D. Returning Filter to Service

The filter will "filter-to-waste" and not be returned to production service until turbidity readings are consistently less than 1.0 NTU. When turbidity samples are satisfactory, the filter-to-waste valve will close and the filtering valve will open. The filter would then be on line.

E. Operating Setpoints

(To be filled in by system Operator)
Storage Tank Controller (STC)

____ feet – WELL PUMP START
____ feet - LOW STORAGE TANK LEVEL ALARM
____ feet - HIGH STORAGE TANK LEVEL ALARM
____ feet – WELL PUMP STOP

F. Alarms

The following alarms and functions are provided:

ALARM CONDITION	LOCAL ALARM	SETPOINT	ACTION
LOW CHLORINE RESIDUAL	YES	1.8 MG/L	Lockout: Well Pump
HIGH RAW WATER TURBIDITY	YES	20 NTU	Activate: Filter to Waste
FILTER #1 HIGH TURBIDITY	YES	1.0 NTU	Alarm: PLC notification
FILTER #2 HIGH TURBIDITY	YES	0.20 NTU	Lockout: Filters and Well Pump
HIGH RAW WATER TURBIDITY	YES	20 NTU	Activate: Autodialer

SECTION 5 EMERGENCY OPERATIONS

A. Elevated Turbidity Operations

Occasionally, high turbidity levels may occur in the raw water supply. The filters are capable of removing up to 20 NTU's of turbidity for short periods of time, but are inefficient at higher levels. Excessive turbidities typically occur during the winter months associated with heavy rainfall and watershed runoff. These events usually last from one to three days. High raw water turbidities will actuate a local alarm light in the plant to alert operators. If possible, the plant should be shut down until the turbidity event has passed. If high turbidities persist, operations may have to be resumed to avoid depletion of the storage tanks. Operation of the filters at reduced flow rates may provide filtered water turbidity levels below the 1.0 NTU maximum allowances. In the event the 1.0 NTU filtration turbidity standards cannot be achieved and water storage levels are critically low, the plant may be operated with special precautions to maintain the water supply as indicated below:

These mandatory actions must be followed when operating at levels above 1.0 NTU:

1. Contact State Department of Health Services (Phone number) and advice immediately of failure to meet turbidity standards.
2. Begin weekly coliform sampling of each filter effluent prior to disinfection. Coliform samples must be taken within 24 hours and must verify that no chlorine residual was present.
3. Increase chlorine dose as required maintaining free chlorine residual in the storage tanks of 2.0 milligrams per liter.
4. Under no circumstances may the filters be by-passed

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WATER TREATMENT PLANT OPERATIONS PLAN AND TECHNICAL REPORT
Los Angeles County, CA

SECTION 6 PERFORMANCE OPTIMIZATION

Performance optimization is determined by evaluation of turbidity analysis recorded data. Under normal raw water quality conditions, filters should be able to consistently produce water with 0.2 turbidity units or less.

Increased filtering performance may be achieved by reducing the flow rate through the filters. Ideally the filtration rate should be adjusted to allow for continuous operation of the filters. Start/stop cycling of the filtration process should be routinely avoided. The filtration rate may be decreased by manipulation of the flow control valves.

SECTION 7 RECORDKEEPING

A. Recordkeeping Procedures

Weekday Plant Checks
Within the first hour of the morning, the operator shall gather plant data to enter on the daily read sheet. This information is pertinent for calculating chemical dosages. At this time the operator shall check all plant equipment for apparent abnormalities while making morning inspections. The information gathered and entered on the daily read sheet includes high and low ambient air temperatures evaporation and rainfall from the previous 24-hour period, chemical tank levels, chemical pump settings, plant influent and effluent flow readings and totalizer readings.

B. Sample Forms

The following forms and charts are maintained for record keeping purposes; examples are included at the end of this section.

FORMS:

- OPERATIONS LOG
- TURBIDITY MONITORING SPREADSHEETS
- CT COMPLIANCE SPREADSHEETS
- BACTERIOLOGICAL SAMPLE SITING PLAN

C. Turbidity Monitoring

Results of raw water, first stage filter effluent, combined filter effluent and recycled water turbidity.

D. Bacteriological Sampling

Raw water shall be monitored for total coliform and either fecal coliform or *E. coli* bacteria using density analysis no less than once each month.

E. Cross Connections

The filter waste and backwash water supply connections are both protected with reduced pressure backflow preventers. No other connections shall be made between the clearwell tanks and the system storage tanks.

SECTION 8 RELIABILITY

A. Alarm System

The Water Treatment Plant is equipped with several process control monitoring systems, which will lock-out plant operations if setpoints are exceeded. Other system status alarms are provided to alert the operator of equipment or subprocess failures. A tabulation of alarm conditions and effects is included in Section 4. Simulation of alarm conditions and confirmation of alarm setpoints is performed on a MONTHLY basis.

B. Emergency Disinfection System

The primary disinfection system consists of one (1) liquid chlorine container and electric metering pump located at the well head. A controlled electric outlet for the metering pump provides automatic on/off operation. A spare liquid metering pump of the same type and capacity and associated hardware/tubing is in stock at the plant. Should the primary metering pump fail, the in-stock replacement can be quickly installed. A second chlorination system is located at the treatment facility and doses the backwash/recycled water. This chlorinator can be used to adjust the chlorine dose and residual chlorine levels.

Case 1 – Emergency disinfection plan – Chlorine residual into the system is less than 0.2 mg/L but not completely absent:

- If any measurement of treatment facility effluent residual chlorine is lower than 0.5 mg/L, determine the cause.
- If the problem cannot be remedied by one person (i.e. chlorine leak, chlorine water supply line leak, etc.), contact Operations Supervisor or the plant operator immediately if it is during regular working hours.
- Plant Supervisor or Plant Operator will notify any other persons that may be affected by the plant shutdown or lack of disinfectant in the water supply. Other agencies that may need to be notified include LADPH and

CDPH. The phone numbers and the persons to shall be attached to this manual and kept on site. Each Treatment Plant Operator has access to each staff member's home phone, cell phone, and pager numbers.

- If an emergency exists, shut down the plant if it has not been shut down already. **USE CAUTION, THINK SAFETY FIRST,** especially if you are alone.

- If there are no apparent leaks and residuals are low, begin manual chlorination of the clearwell and bring the free chlorine residual up to 3.0 mg/L.

- Begin taking free chlorine residuals and Bac-T samples downstream of the clearwell. Add sodium hypochlorite wherever needed.

- Start repairs on the chlorine equipment and test when completed.

- Restart the treatment facility and closely observe the operations until everything has stabilized.

Case 2 – Emergency disinfection plan – Chlorine residual in the system is completely absent:

- If any measurement of treatment facility effluent indicates that residual chlorine is absent, shut down the plant if it has not been shut down already. **USE CAUTION, THINK SAFETY FIRST,** especially if you are alone. Determine the cause.

- If the problem cannot be remedied by one person (i.e. chlorine leak, chlorine water supply line leak, etc.), contact the Operations Supervisor or the plant operator immediately if it is during regular working hours.

- Plant Supervisor or Plant Operator will notify any other persons that may be affected by the plant shutdown or lack of disinfectant in the water supply. Other agencies that may need to be notified include CDPH, Department of Fish and Game, and the County Fire Department. The phone numbers and the persons to shall be attached to this manual and kept on site. Each Treatment Plant Operator has access to each staff member's home phone, cell phone, and pager numbers.

- If there are no apparent leaks and residuals are low, begin manual chlorination of the clearwell and bring the free chlorine residual up to 3.0 mg/L.

- Begin taking free chlorine residuals and Bac-T samples downstream of the clearwell. Add sodium hypochlorite (bleach) wherever needed.
- Start repairs on the chlorine equipment and test when completed.
- Restart the treatment facility and closely observe the operations until everything has stabilized.

SECTION 9 MAINTENANCE

A. Maintenance Services

Plant and system maintenance is provided by WTI staff. Maintenance routines are categorized into WEEKLY, MONTHLY, SEMI-ANNUAL, and, ANNUAL Task Groups. Specific information relating to maintenance of equipment within a Task Group is included within the manufacturers' data provided with the plant equipment.

B. Preventive Maintenance Schedule

In-house preventive maintenance will be provided in all but the most extreme cases. Emergency maintenance will also be performed by the Operator's specialized staff as required to render instrumentation, electrical, heavy mechanical and heavy equipment services to the facility.

WEEKLY:	Check well pump for proper operation. Check for vibration, noise, leaks, or other unusual conditions. Check chlorination system for leaks. Test automatic dialer.
MONTHLY:	Check packing leakage rate on pumps (if applicable). Drain and flush turbidimeter vessels. Verify correct operation of sample pumps. Check alarm indicator lights.
SEMI-ANNUAL:	Lubricate door locks & hinges. Operate all valves within treatment facility and cistern well sites.
ANNUAL:	Drain and inspect storage tank tanks. Clean Storage tanks as necessary. Inspect well. Check all pump fasteners and mounting bolts. Check piping restraints and support bolts. Inspect filter media. Tighten all electrical connections.

Azusa Springs Quotation Worksheet
March 2019

Item 18

Frequency		Activity Description	Amount	Total
Weekly		Manual Filter Backwash and Review PLC Data 12 hours a week at $ 130 per hour	1560.00	81120.00
Monthly		Provide check sheets, report Bacti, production & dist. Reports 4hours @ $ 130	520.00	6240.00
Monthly		Replace CL17 Reagents	75.00	900.00
Quaterly		Rebuild Chemical Injection Pumps Liquid end PT's @ 250.00 ST's @ 65.00 ea.	630.00	2520.00
Quaterly		Calibrate using HACH Factory, CL17, & 1720's		4500.00
Bi-Annual		Filter manitenance and inspection	180.00	360.00
Bi-Annual		Add media to filter units	400.00	800.00
Annual		Provide Consummer Confidence Report		500.00
Ongoing		Supply Sodiumhypochlorite as needed		800.00
Ongoing		Supply Polymer as needed		800.00
Ongoing		Sample site plan & emergency notification		500.00
		WATER QUALITY MONITORING		
Monthly		Bacteriological Samples 72 total @ 35.00 ea. P/A	35.00	2520.00
	1	General Mineral		125.00
	1	General Physical		20.00
	1	Inorganic Chemical Analysis		175.00
	3	Nitrate as NO3	30.00	90.00
	3	Nitrate + Nitrite	30.00	90.00
	3	TTHM	50.00	150.00
	3	HAA5	175.00	525.00
	2	Perchlorate	35.00	70.00
	15	Lead & Copper	40.00	600.00
	4	Gross Alpha	50.00	200.00
	4	Radium 228	175.00	700.00
	4	VOC	285.00	1140.00
	48	*E* -coli LT2 monitoring	30.00	1440.00

Azusa Springs Quotation Worksheet
March 2019

Item 18

		TOTAL	106885.00

Additional Expences

1	Stablcal Turbidity Calibration Kit	600.00	600.00
24	Stablcal Formazin	50.00	1200.00
1	Ph tester	150.00	150.00
4	Cl2 Swift testers	80.00	320.00
1	Pocket Temp Tester	150.00	150.00
		TOTAL	109305.00
	ADMIMISTRATIVE FEES @ 15% of Total		16395.75
	TOTAL CONTRACT		125700.75
	MONTHLY AMOUNT		10475.06

From: Phillip Holderness
To: Michelle Tarian
Cc: Adam Hardaway
Subject: RE: Water System Operator Request for Estimate
Date: Thursday, March 14, 2019 2:37:12 PM

Hello Michelle,

Below is an informal estimate for contract operator services for the Azusa Springs Water System. If the decision is made to move forward we will provide a more detailed proposal.

Weekly

Contract operator onsite one day each week to assess water treatment performance and adjust as needed, review analyzer logs, verify calibration and calibrate online analyzers as required, perform wet lab analysis, collect samples and transport to certified laboratory for analysis, complete a plant check and gather operational data maintaining the operations log.

Cost: $1,200/week

Monthly

Prepare monthly report and submit to Los Angeles County Department of Public Health by the 10th day of the following month.

Cost: $500/month

Thank you for the opportunity to provide you this estimate. Please contact me if you have any questions.

Regards,

Phillip Holderness
Water Services Manager
Seaco Technologies, Inc.
661-213-6645
pholderness@seacotech.com

From: Michelle Tarian [mailto:mtarian@wca.ca.gov]
Sent: Thursday, March 14, 2019 1:36 PM
To: Phillip Holderness
Subject: RE: Water System Operator Request for Estimate

Thank you very much.

McMor Chlorination, Inc.

PROUDLY SERVING THE WESTERN U.S. SINCE 1981

- **CA. State Licensed Water Treatment and Distribution Operators**
- **CA. State Licensed Potable Water Hauling**
- **NSF Chemical Sales**
- **Pump Repairs and Sales**
- **Disinfection Services for Pipelines, Reservoirs, and Commercial Structures**
- **CA State Licensed Water Conditioning Contractor**
- **CA State Licensed Waste Water Operators**
- **Water Treatment Systems**
- **DPR Microbial Pest Control**
- **Tank Cleaning and Site Maintenance**

DATE: March 15, 2019

COMPANY NAME: Watershed Conservation Authority

ATTENTION: Michelle Tarian
Office # (626) 815-1019 Ext. 118
Email: mtarian@wca.ca.gov

REGARDING: Small Surface Water Treatment Plant in Azusa, CA

BID: For the following

- minimum weekly performance checks, data review, filter backwash
- semi-monthly inspections of the distribution, treatment, storage and filter systems,
- preparation of monthly reports, conducting necessary and required bacteriological and water quality monitoring reports and sampling.
- quarterly activities including calibration services for the chlorine analyzer**.**

$2500.00 Monthly

Southern California: 661.323.9400 Northern California 925.449.2295
Dennis Gatson dgatson@mcmorchlor.com www.mcmorchlor.com

CALIFORNIA STATE LICENCED WATER TREATMENT AND DISTRIBUTION OPERATORS
CALIFORNIA STATE LICENSED WASTEWATER OPERATORS
CONTRACTORS LICENSE # 856586, 1002280
FOOD AND DRUG LICENSE #55545
MICROBIAL PEST CONTROL DPR #136962
DIR#1000016149

March 21, 2019 – Item 18

RESOLUTION 2019-19

RESOLUTION TO AUTHORIZE THE CHAIR OR DESIGNEE TO NEGOTIATE AND ENTER IN TO A PROFESSIONAL SERVICES CONTRACT TO PROVIDE SERVICES FOR AZUSA SPRINGS WATER SYSTEM.

WHEREAS, the Watershed Conservation Authority (WCA) has been established as a joint powers agency between the Rivers and Mountains Conservancy and the Los Angeles County Flood Control District; and

WHEREAS, the Watershed Conservation Authority (WCA) has further been established to focus on projects which will provide open space, habitat restoration, and watershed improvement projects in both the San Gabriel and Lower Los Angeles Rivers watershed; and

WHEREAS, this action approves a resolution to authorize The Chair or Designee to negotiate and enter in to a professional services contract to provide services for Azusa Springs Water System for a do not exceed amount of $34,568; and

WHEREAS, the proposed action is exempt from the provisions of the California Environmental Quality Act; **NOW**

Therefore be it resolved that the WCA hereby:

1. **FINDS** that this action is consistent with the purposes and objectives of the WCA.

2. **FINDS** that the actions contemplated by this resolution are exempt from the environmental impact report requirements of the California Environmental Quality Act (CEQA).

3. **ADOPTS** the staff report dated March 21, 2019.

4. **AUTHORIZES** the chair or designee to negotiate and enter into a professional services contract to provide services for Azusa Springs Water System for a do not exceed amount of $34,568.

~ End of Resolution ~

//

Motion: _____ Second: _____

Ayes: _____ Nays: _____ Abstentions: _____

Resolution 2019-19

Passed and Adopted by the Board of the
WATERSHED CONSERVATION AUTHORITY
On March 21, 2019

_____
Herlinda Chico,
Governing Board Vice Chair

ATTEST: _____
David Edsall, Jr.
Deputy Attorney General