

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**BOARD ORDER NO. R6V-2017-0006**  
**WDID NO. 6B141306003**

WASTE DISCHARGE REQUIREMENTS  
FOR

**CRYSTAL GEYSER CABIN BAR RANCH WATER BOTTLING FACILITY**

Inyo County

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The California Regional Water Quality Control Board, Lahontan Region (Water Board), finds:

1. Discharger

Crystal Geyser Roxane, LLC is the owner of the Cabin Bar Ranch in western Inyo County, where it proposes to operate a newly constructed spring water bottling facility. For the purposes of this Order, Crystal Geyser Roxane, LLC is referred to as the "Discharger" and its Cabin Bar Ranch water bottling operation is referred to as the "Facility."

2. Facility Location

The Facility is located on approximately 43 acres of the Discharger's 420-acre Cabin Bar Ranch property located at 210-500 South Highway 395, immediately south of the unincorporated town of Cartago (Assessor's Parcel Numbers 033-020-11, 033-440-6 through 033-440-11). The Facility is sited between US Highway 395 and the southwest playa shoreline of Owens Dry Lake. The Facility's location is shown in Attachment A, which is made a part of this Order.

3. History of Previous Regulation by the Water Board

This is a new facility that has not been previously regulated by the Water Board.

4. Reason For Action

The Discharger filed a Report of Waste Discharge (RWD) on June 13, 2013, requesting new waste discharge requirements for the proposed Facility. Additional information to complete the RWD was submitted on October 4, 2014 and June 16, 2016. According to information provided by the Discharger, at full build-out the Facility will produce approximately 40,000 gallons per day (gpd) of industrial wastewater which will be disposed of onsite in a percolation pond. The wastewater is comprised primarily of ozonated spring water containing byproduct and breakdown constituents related to producing bottled water, equipment cleaning, and sanitizing that may affect receiving water quality. This Order is needed to set effluent and receiving water limits for the industrial wastewater discharge, require preparation and implementation of a Storm Water Pollution Prevention Plan, and prescribe monitoring and reporting to ensure water quality protection.

5. Facility Description

The Facility will be constructed in phases with the first phase consisting of one bottling line housed in an 116,000-square foot building, with a 4,000-square foot storm water detention basin, 4,500-square foot percolation pond, and parking areas with truck staging and loading docks. The Facility at full build-out will consist of four water bottling lines housed in a 198,000-square foot building. Water bottles will be manufactured onsite from polyethylene terephthalate (PET) pellets shipped in from outside vendors, which are formed into drinking water bottles using a blow molding process. The bottling facility will utilize spring water from three existing production wells to supply bottling operations (wells CGR-8, -9, and -10). A fourth existing well will provide domestic potable water to supply restrooms and drinking water for the Facility's employees.

6. Authorized Disposal Site

The authorized disposal site for the Facility is the 4,500-square foot percolation pond, shown in Attachment B, Site Layout, which is made a part of this Order. The authorized disposal site for storm water from parking and staging areas is the storm water retention basin, also shown in Attachment B.

7. Discharge Description

Based on information provided by the Discharger, the wastewater discharge will be comprised of spring water which has been filtered and exposed to ozone, chlorine, and cleaning, anti-scaling and sanitizing agents of acidic and basic chemistry. Approximately 70 percent of the wastewater is ozonated spring water (28,500 gallons of the estimated 40,000 gpd discharged at full build-out). The wastewater will be generated through three processes: bottled water production, equipment cleaning/sanitation, and cooling tower operations, described below. Due to high permeability soils and shallow depth to groundwater at the Facility, all wastewater from employee facilities is discharged to alarmed septic holding tanks, which are pumped and the waste disposed of off-site. This permit does not authorize onsite disposal of domestic wastewater.

- a. Bottled Water Production. Spring water from onsite wells is filtered through two 5-micron bag filters to remove sediments, and then injected with ozone. Ozonated water passes through ceramic microfilters equipped with a clean-in-place (CIP) system. The CIP system consists of three tanks: one 185-gallon tank containing acidic solution (two (2) percent phosphoric acid,); one 185-gallon tank containing caustic solution (three (3) percent sodium hydroxide), and one tank containing ozonated rinse and purge water. Prior to discharge, CIP solutions are neutralized in place by mixing the acidic and caustic solutions until the pH reaches 6 to 9 standard units. CIP tanks are drained up to six (6) times per year and discharged to the percolation pond.
- b. Equipment Cleaning/Sanitizing. In addition to the CIP system, bottle filler lines are sanitized daily and cleaned weekly. Cleaning solutions contain chlorinated water, caustic soda, phosphoric acid, detergents and surfactants; sanitizing solution contains chlorinated water, ammonium compounds, chlorides, and detergents.

- c. Cooling Towers. Three cooling towers are used to circulate spring water in a closed loop to cool production equipment such as bottle-making and filling lines. The cooling tower water does not come into direct contact with the equipment it cools. Cooling tower water is treated with an anti-scalant containing phosphoric and sulfuric acids. Approximately 4,000 gpd cooling tower water is discharged to the percolation pond.

8. Constituents of Concern

Constituents of concern (COCs) which may affect groundwater quality are naturally occurring arsenic in spring water, and byproducts present in cleaning, sanitizing, and industrial solutions shown in Table 1, below. These byproducts may affect receiving waters by adding salts, total dissolved solids (TDS), disinfection byproducts, and pH-altering substances (acids and bases). PET pellets<sup>1</sup> used in water bottle manufacturing may be present in wastewater discharges if pellets are spilled and discharged to floor drains.

Table 1. Constituents of Concern.

Product Use	Product Compounds	Byproducts
Cleaning solutions/detergents	Sodium hydroxide (caustic soda)	Sodium
	Phosphoric acid	Phosphate
	Sodium xylene sulfonate	Sodium, sulfur oxides
Sanitizing solutions	Alkyl dimethyl benzyl ammonium chloride, octyl detyl dimethyl ammonium chloride, diocyl	Chloride, nitrogen compounds, methylene blue active substances (MBAS, i.e., foaming agents)
	Peroxyacetic acid, acetic acid, hydrogen peroxide	Acetic acid (pH altering)
	Sodium hypochlorite	Sodium, chloride
Industrial materials	Hydraulic fluids, oils, diesel fuel, cleaning solvents	Oil and grease, volatile/semi-volatile organic compounds (VOCs/SVOCs)
Cooling tower anti-scalant	Phosphoric acid, sulfuric acid	Phosphate, sulfur compounds
Chlorinated/ozonated water	Chlorinated/ozonated groundwater	Residual chlorine, trihalomethanes, haloacetic acids, formaldehyde, bromate, chlorite
Pre-production plastic	Polyethylene terephthalate	Micro-debris

<sup>1</sup> PET pellets, also known as "pre-production plastic" or "nurdles", are the raw plastic resin materials that are molded into finished plastic products (here, water bottles). They range from 1 to 5 millimeters in size.

9. Expected Discharge Water Quality

Based on information provided by the Discharger, discharge water quality is expected to consist of constituents at concentrations shown in Table 2. One production water well at the Facility (CGR-8, the southernmost well) contains naturally occurring arsenic at 9.5 parts per billion (ppb); production wells CGR-9 and -10 show non-detectable levels of arsenic. Production water is blended from the three source wells to ensure arsenic levels remain below the MCL; therefore, arsenic filtration is not needed at the Facility. Table 2 shows the constituents of concern, estimated concentrations, and associated maximum contaminant levels (MCLs), secondary maximum contaminant levels (SMCLs), or other water quality standards. No COCs are estimated to exceed applicable water quality standards.

Table 2. Expected Discharge Water Quality for COCs.

Constituent (units)	Expected Concentration, Average Monthly Values	MCL, SMCL or Water Quality Standard
Sodium (parts per million, ppm)	2 parts per million (ppm)	69 <sup>2</sup>
Arsenic, dissolved and total (ppb)	up to 6 ppb	10
Total Dissolved Solids (ppm)	up to 145 ppb	500
Chloride (ppm)	4 ppm	250
pH (Standard units)	6.9-8.5	6.5-8.5
Sulfate (ppm)	24 ppm	250
Total Phosphate	2 ppb	not established
VOCs/SVOCs* (ppb)	not present	varies by chemical
Methylene Blue Active Substances [foaming agents] (ppm)	up to 0.5	0.5

\*Volatile/Semi-volatile organic compounds

10. Requirement for Additional Metals Effluent and Groundwater Sampling

Based on composite sampling of waste streams at the Discharger's adjacent Olancha spring water bottling facility, certain metals besides arsenic were detected at levels higher than present in source water. For example, antimony, barium, copper, molybdenum, and zinc were detected at levels three to six times higher in discharge sampling than in source water production well sampling. The reason for these increases is unknown. To better characterize wastewater discharges for metals, this Order requires monthly effluent sampling for California Assessment Manual (CAM-17) total and dissolved metals<sup>3</sup> for six (6) months. If CAM-17 metals do not exceed any applicable MCL in the six (6)-month sampling period, the effluent

<sup>2</sup> UN Food and Agricultural Organization (UNFAO) Agricultural Water Quality Goal.

<sup>3</sup> Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Tin, Vanadium, Zinc

monitoring frequency for these metals (except for arsenic) will be reduced. Groundwater monitoring for CAM-17 will be required on a quarterly basis, and may be reduced (except for arsenic) if effluent monitoring indicates that applicable MCLs are not exceeded.

11. Percolation Pond, Capacity

Wastewater will be discharged to a 4,500-square foot unlined percolation pond on the Cabin Bar Ranch property. Percolation tests conducted at the site indicate that percolation rates are less than one (1) minute per inch. Based on the percolation pond size and percolation rate, the pond will have the capacity to infiltrate 21,000 cubic feet of wastewater, more than the expected amount at full build-out (5,347 cubic feet).

12. Scope of Activities Covered and Excluded Under this Order

This Order covers wastewater discharges from the production, cleaning, and sanitizing activities related to spring water bottling, and storm water discharges from parking and staging areas. This Order does not authorize excavation/dredge and fill activities in waters of the United States or other surface waters. This Order does not authorize storm water discharges associated with construction activities that disturb one acre or more of land, or construction activities that disturb less than one acre of land, but are part of a larger common plan of development. Such discharges are prohibited except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

13. Site Storm Water Management

Storm water will be directed to a 4,000-square foot retention basin via surface swales and storm drains. Storm water will be treated by Krista DVS hydrodynamic separators to remove oils and sediments prior to discharge to the basin. The basin is sized to retain the 50-year storm event. Storm water flows exceeding the 50-year event will overflow the retention basin and sheet flow onto coarse sands and gravels of the Owens Dry Lake shoreline and will not reach surface waters or waters of the United States. The Discharger is not obtaining coverage under the State Water Board's NPDES Industrial Storm Water General Permit (IGP) because the SIC code for the Facility's primary activity, *Bottling Spring and Mineral Water* (SIC Code 5149) is not a listed SIC code requiring coverage under the IGP, and because storm water discharges to waters of the United States will not occur. In lieu of coverage under the IGP, this Order requires prohibitions, limitations, and provisions for storm water and non-storm water discharges associated with activities at the Facility to protect water quality in waters of the state (i.e., groundwater). This Order includes a time schedule for submitting a Storm Water Pollution Prevention Plan (SWPPP) specifying best management practices and other requirements to ensure storm water discharges do not impact receiving groundwaters, similar to requirements of the IGP.

14. Site Geology

The Facility is located in the southern portion of the Owens Valley, near the southwestern shore of Owens Dry Lake. The eastern base of the Sierra Nevada Mountains is one mile west of the site. The Owens Valley is formed by the Sierra Nevada Frontal Fault to the west and the White/Inyo Mountains to the east. The

Sierra Nevada Mountains are generally composed of Cenozoic age igneous rocks of granodiorite-granite composition whereas the White/Inyo Mountains, to the east, consist of Pre-Cambrian to Triassic sedimentary rock locally intruded with Cenozoic granitic rocks. The site overlies a transition zone between alluvial deposits derived from erosion of the Sierra Nevada Mountains to the west and the lacustrine deposits from ancestral Owens Lake to the east. The alluvial deposits in the western portion of the site consist of boulders, gravels, and sands with relatively little fine-grained sediment. Farther east, the alluvial deposits intermingle with the fine-grained lacustrine deposits and the overall nature of the sediments beneath the site become finer to the east.

#### 15. Site Hydrology

Numerous springs are located on the Facility property, with the majority located south of the Facility along the "Spring Line Fault," which bisects the property in a northwest/southeast direction. The springs are thought to mark the line of contact between the water-bearing alluvial sediments and less permeable, finer-grained lakebed sediments to the east of the fault. A man-made irrigation pond is present at the Facility and will be placed under conservation easement for the benefit of the California Department of Fish and Wildlife. Cartago Creek flows intermittently just south of the Facility, and approximately six (6) acres of jurisdictional wetlands are located adjacent to the percolation pond at the Facility's eastern boundary.

#### 16. Site Hydrogeology

The Facility is located in the Owens Valley Groundwater Basin ((Department of Water Resources No. 6-12), within the Owens Hydrologic Unit (United States Geological Survey No. HU 603) and the Lower Owens Hydrologic Area (USGS No. HA 603.30). Groundwater beneath the Facility occurs in sand and gravel alluvium interbedded with layers of fine-grained lacustrine deposits, known as the shallow zone. The spring water production wells (CGR-8, -9, and -10) are screened in the shallow zone aquifer at 53 to 73 feet below ground surface (bgs), west of the Spring Line Fault. The shallow zone aquifer is separated from a deeper aquifer by lower permeability materials at approximately 80 feet bgs, creating an aquitard that considerably restricts but does not entirely prevent groundwater movement between the aquifer layers. The deeper aquifer is semi-confined and water level comparisons of wells screened in the deep zone and shallow zone indicate a component of vertical upward groundwater gradient. Depth to groundwater at the Facility is shallow, ranging from ground surface (i.e., springs) to a depth of 24 feet bgs. Groundwater flow in the shallow aquifer zone is generally to the east/ northeast, discharging to Owens Dry Lake, located approximately 800 feet east of the Facility. The primary source of groundwater recharge in the Owens Valley Groundwater Basin is from percolation of streamflow from the surrounding mountains.

#### 17. Land Uses

The Facility is located in rural western Inyo County, adjacent to US Highway 395. Land uses in the area are undeveloped open space, low-density residential and commercial uses in the unincorporated town of Cartago just to the north, and the existing Crystal Geyser-Olancho bottling plant located approximately 0.75 miles south of the Facility. Cabin Bar Ranch is bordered on the east by the western shoreline of Owens Dry Lake. The California Department of Fish and Wildlife owns a

218-acre parcel of land just to the north and east of the discharge point for the Facility, and manages that land as the Cartago Wildlife Area.

18. Water Quality Control Plan for the Lahontan Region

The Water Board adopted the *Water Quality Control Plan for the Lahontan Region*, (Basin Plan), which took effect on March 31, 1995. This Order implements the Basin Plan, as amended.

19. Groundwater Beneficial Uses

The beneficial uses of the groundwater of the Owens Valley Groundwater Basin, as set forth and defined by the Basin Plan, are:

- a. Municipal and Domestic Supply (MUN)
- b. Agricultural Supply (AGR)
- c. Freshwater Replenishment (FRSH)
- d. Industrial Service Supply (IND)
- e. Wildlife Habitat (WILD)

20. Groundwater Quality

- a. Source water quality. Water quality in production wells CGR-8, -9, and -10 is excellent. Production wells are located on the west side of the Spring Line Fault, upgradient from the disposal site which is located east of the fault. In general, groundwater quality becomes poorer (e.g., higher concentrations of salts and metals) in the eastward direction toward Owens Dry Lake. Laboratory data from sampling conducted in 2010 shows non-detectable levels of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and pesticides. Concentrations of metals, radiological materials, microbiological indicators, and secondary inorganics were not detected above primary or secondary maximum contaminant levels. Total dissolved solids ranged from 121 to 145 parts per million (ppm). Nitrogen as nitrate ranged from non-detect to 0.16 ppm. Total coliform and E. coli were not detected in shallow zone wells. Arsenic was detected at a maximum concentration of 9.5 ppb in CGR-8, and was not detected in CGR-9 and -10. The MCL for arsenic is 10 ppb.
- b. Receiving water quality. Three monitoring wells (MWs) were installed in August 2016 to monitor receiving water quality near the percolation pond, on the east side of the Spring Line Fault. MW WW-1 is located upgradient of the pond, WWs-2/2S and -3/3S are located in the downgradient flow direction. MWs WW-2/2S and WW-3/3S are multi-depth wells installed in separate, adjacent boreholes. The shallow wells (WW-2S and WW-3S) are screened from 4.5 to 7.5 bgs, above a fine-grained layer to monitor first-encountered groundwater below the percolation pond, and the deeper wells from 9 to 13 feet bgs to monitor groundwater below the fine-grained layer. The fine-grained layer found in the downgradient wells was not present in the upgradient well WW-1. Table 3 summarizes the ranges of pre-discharge groundwater monitoring results from two sampling events conducted in September and October 2016. Shaded cells indicate sample results exceeding an MCL or standard.

Table 3. Receiving Water Results for Discharge Pond Area.

Constituent	Result (units)	MCL/Standard (units)
Arsenic, dissolved	315 - 521 ppb	10 ppb
Total Dissolved Solids	920 – 1,580 ppm	500 – 1,500 ppm
Sulfate	110 – 230 ppm	250 ppm
Sodium	299 – 522 ppm	Not established
Chloride	21 – 63 ppm	250 ppm
Total Nitrogen	0.98 – 2 ppm	Not established
pH	9.3 – 10.9	6.5 – 8.5
Alkalinity	423 – 720 ppm	Not established

21. Basis for Numeric Effluent Limits in this Order

This Order sets numeric effluent limits for constituents of concern that have the potential to degrade receiving groundwater quality or beneficial uses. The arsenic effluent limit is set at 10 ppb, as a monthly average, based on information provided by the Discharger on maximum arsenic levels present in the source water (9.5 ppb in source water well CGR-8), and the Discharger's stated ability to blend source water to ensure that arsenic in wastewater does not exceed the MCL. For TDS, the effluent limit is set at 25 percent greater than the maximum concentration detected in wastewater discharges. This allows for variation due to the limited dataset on discharge water quality, but results in effluent limits well below the SMCL for TDS. For disinfection byproducts and CAM-17 metals, wastewater discharges must not exceed applicable MCLs on an average monthly basis.

Table 4. COCs, Water Quality Standards, Waste Discharge Data and Effluent Limits.

Constituent (units)	Water Quality Standard	Estimated Waste Discharge Concentrations (from Table 2)	Effluent Limit, Average Monthly Values
Arsenic, dissolved (ppb)	10 (MCL)	2 – 6 ppb; up to 9.5 ppb in source well CGR-8	10 ppb
Total Dissolved Solids (ppm)	500 (SMCL)	Up to 145 ppm	181 (145 plus 25 percent)
pH (standard units)	6.5-8.5 (Basin Plan objective)	6.9 – 8.5	6.5 - 8.5

22. California Water Code Section 13172

Water Code section 13172 directed the State Water Resources Control Board (State Water Board) to write regulations for waste disposal sites, “except for sewage treatment plants...” to protect water quality. Those regulations are now incorporated in the California Code of Regulations (CCR), title 27. The statute exempts the wastewater treatment facilities from the regulation, but does not exempt the disposal of treated wastewater, except under specified conditions.



23. California Code of Regulations Title 27; Exemption

California Code of Regulations, title 27, division 2, (Title 27) specifies regulatory and design criteria for discharges of solid wastes and wastewater to land for treatment, storage, or disposal. Section 20090 of Title 27 specifies exemptions for discharges of wastewater to land if the following conditions are met:

- a. The applicable Water Board has issued WDRs, reclamation requirements, or waived such issuance;
- b. The discharge is in compliance with the applicable water quality control plan, and
- c. The wastewater does not need to be managed according to chapter 11, division 4.5, title 22 of this code as a hazardous waste.

Discharges authorized under this Order satisfy the conditions for exemption from Title 27 because 1) this Order constitutes WDRs; 2) this Order requires the discharges to be in compliance with the applicable water quality control plan; and 3) the wastewater does not need to be managed as a hazardous waste, as described in Findings 9 and 10.

24. California Water Code Section 13367

Water Code section 13367 directs the state and regional water boards to implement a program to control discharges of pre-production plastics from point and non-point source discharges. The program shall, at a minimum, require plastic manufacturing, handling, and transportation facilities to implement best management practices (BMPs) to minimize discharges of pre-production plastics. This Order carries out the requirements of Water Code section 13367 by requiring the Discharger to submit a plan detailing BMPs applicable to pre-production plastics transfer, storage and handling, and requires implementation and monitoring to ensure such BMPs are effective in limiting the discharge of plastics to the environment.

25. Policy for Maintaining High Quality Waters

State Water Resources Control Board Resolution No. 68-16 requires that existing high quality waters will be maintained until it is demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the [State or Regional Water Board] policies; and requires that any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters must meet waste discharge requirements which will result in the best practical treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained.

This Order authorizes the discharge of ozonated spring water which contains minor amounts of breakdown products from cleaning, sanitizing, and equipment cooling, as described in Findings 8 and 9. This Order sets effluent limitations that allow for natural variability in source water and requires reasonable control measures to achieve MCLs (or better) in wastewater discharges. This Order also establishes monitoring requirements to verify the effectiveness of the effluent limitations in

protecting water quality and ensure that waste discharges do not exceed MCLs. Therefore, the requirements of Resolution No. 68-16 are met.

26. Water Code Section 13241 Considerations

Pursuant to California Water Code section 13241, the requirements of this Order take into consideration the following:

a. Past, present, and probable future beneficial uses of water.

The findings of this Order identify past, present, and probable future beneficial uses of water, as described in the Basin Plan, that are potentially and currently affected by the discharge. This Order does not authorize activities that would adversely affect beneficial uses of water in the Owens Valley Groundwater Basin.

b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

The findings of this Order concerning geology, hydrogeology, and hydrology provide general information on the hydrographic unit environmental characteristics. Findings 19 and 20, above, discuss information concerning the quality of available water and the potential uses of the groundwater.

c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.

Elevated levels of arsenic and TDS occur naturally in the aquifer sediments and receiving waters of the Owens Valley Groundwater Basin near the Facility. For example, data collected by the Great Basin Unified Air Pollution Control District from piezometers installed in the Owens Lakebed (S3[1] and Q4[9]) show arsenic ranging from <20 ppb up to 47,400 ppb, illustrating the variable nature of arsenic in the area. TDS in groundwater beneath the Owens Dry Lake ranges from 20,000 to 40,000 ppm; however, these values are from wells located 4 to 6 miles from the Facility's discharge point. At the Discharger's Olancha water bottling facility (Olancha facility), located immediately south of the Cabin Bar Ranch facility, naturally occurring arsenic in groundwater exceeds the MCL of 10 ppb. The Olancha facility utilizes a treatment system to filter the groundwater to remove arsenic prior to bottling. Past unauthorized discharges from the arsenic treatment system's regeneration back-flush water are the subject of an ongoing investigation. Impacts to soil and/or groundwater from those unauthorized discharges will be addressed under a separate action, such as a cleanup and abatement order issued to the Discharger. High-concentration arsenic discharges ceased in 2014, and water quality should be restored to background levels or established cleanup goals following any required remedial actions.

d. Economic considerations. The project is a water bottling facility that will provide additional employment opportunities and tax revenue for Inyo County. It is estimated that at full build-out, the facility would generate 50 new jobs. The Discharger has not indicated any financial hardship in complying with the requirements of this Order.

- e. The need for developing housing within the region. The project does not involve developing housing. The Environmental Impact Report (EIR) completed for the project estimated that if all 50 new employees were to move to Inyo County to fill jobs for the Facility, this number would not represent a substantial increase in the demand for construction of new housing or infrastructure within a reasonable commute distance from the Facility. Therefore, the EIR concluded that the project would not result in substantial population growth requiring new housing in the region.

27. The Right to Access to Clean Water

Water Code section 106.3 states in part "... every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." This Order does not authorize the degradation of groundwater, and requires monitoring for potential degradation of water quality.

28. California Environmental Quality Act

The Inyo County Planning Department (County) prepared an EIR for the Project. The EIR was prepared pursuant to the California Environmental Quality Act (CEQA Public Resources Code 21000, et seq.) and circulated under State Clearinghouse No. 2011091055. On February 19, 2014, the County certified the EIR following public review. The EIR concluded that the proposed project would have less than significant impacts with respect to groundwater and surface water hydrology and no mitigation measures were required; however, as a condition of project approval, the County required the Discharger to follow recommendations made in a 2012 Hydrogeologic Evaluation prepared by Richard Slade and Associates. As a result, the Discharger prepared a groundwater mitigation monitoring and reporting program (GMMRP), as set forth in the EIR. The GMMRP was submitted, reviewed by the Inyo County Water Department, and approved by the County at a public meeting held on July 8, 2014. The GMMRP sets forth monitoring and reporting requirements to address potential impacts from groundwater pumping at Cabin Bar Ranch to water quality or quantity in private water supply wells (e.g., Cartago Mutual Water Company wells or other domestic wells in the Cartago.)

GMMRP monitoring wells are located to detect changes in groundwater levels and water quality such that any potential impacts to domestic wells due to groundwater pumping will be detected before domestic wells are actually impacted. Trigger levels (both for potential water quantity and water quality impacts) requiring mitigation are outlined in the GMMRP. Water quantity triggers are groundwater drawdown levels due to pumping at the Cabin Bar Ranch, defined as a total lowering of water levels below a groundwater level baseline for each designated monitoring location. Water quality triggers for sodium, alkalinity, TDS, barium, arsenic, and chloride were developed based on MCLs, USEPA Advisory Levels, and TDS concentrations in Owens Lake monitoring wells. Other triggers are specified for riparian and wetland habitat metrics such as vegetation, macroinvertebrate metrics, and groundwater levels.

The Water Board, acting as a CEQA Responsible Agency in compliance with the CCR, title 14, section 15096, has considered the EIR for the Project and its conclusion that impacts from the Project will result in less than significant impacts to

groundwater and surface water hydrologyBased on this consideration, the Water Board finds that the conditions required in this Order and the recommendations in the EIR to develop and implement the GMMRP are adequate to reduce potential water quality impacts to less than significant.

**29. Notification and Consideration of Comments**

Water Board staff solicited public comments by placing a copy of the Tentative WDRs on the Water Board’s internet site on November 1, 2016, and distributing the Tentative WDRs to the Discharger and known interested parties. A public information meeting was held in Olancho on December 2, 2016, to discuss the WDRs and accept comments from the public. The Water Board, in a public meeting on January 11, 2017, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that, pursuant to Water Code section 13263, the Discharger must comply with the following:

**I. Discharge Specifications**

**A. Effluent Limitations**

1. The total flow of wastewater to the authorized disposal site (percolation pond) must not exceed the infiltration capacity of the percolation pond.
2. Wastewater discharged to the authorized disposal site must not contain trace elements, pollutants, or contaminants, or combinations thereof, in concentrations that are toxic or harmful to humans or to aquatic or terrestrial plant or animal life.
3. The average monthly concentration of constituents detected in wastewater discharged to the authorized disposal site must not exceed a maximum contaminant level specified for CAM-17 metals or disinfection byproducts.
4. Wastewater discharged to the authorized disposal site must not exceed the following effluent limits. As described in Finding 21, these limits are set based on estimated concentrations in wastewater discharged to the authorized disposal site.

Table 5. Effluent Limits

<b>Constituent (units)</b>	<b>Effluent Limit, Average Monthly Values</b>
Arsenic, dissolved and total (ppb)	10
Total Dissolved Solids (ppm)	181
pH (standard units)	6.5-8.5

B. Receiving Water Limitations

The discharge of waste must not cause the presence of the following substances or conditions in the groundwater of the Owens Valley Groundwater Basin.

1. Bacteria, Coliform - In groundwater designated as MUN, the median concentration of fecal coliform organisms over any seven-day period shall be less than 1.1/100 milliliters.
2. Chemical Constituents - Groundwater designated as MUN shall not contain concentrations of chemical constituents, as a result of the discharge, in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified in the following provisions of title 22 of the CCR, which are incorporated by reference into this Order:
  - a. Table 64431-A of section 64431 (Inorganic Chemicals),
  - b. Table 64431-B of section 64431 (Fluoride),
  - c. Table 64444-A of section 64444 (Organic Chemicals),
  - d. Table 64449-A of section 64449 (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits), and
  - e. Table 64449-B of section 64449 (Secondary Maximum Contaminant Levels-Ranges).
  - f. This incorporation-by reference is prospective includes future changes to the incorporated provisions as the changes take effect.
  - g. Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).
  - h. Where groundwaters contain naturally occurring chemical constituents in excess of MCLs or SMCLs, the discharge of waste shall not cause an increase in concentrations of such constituents. "Increase in concentration" shall be determined using a statistical method proposed by the Discharger and accepted by the Water Board.
3. Radioactivity - Groundwater designated as MUN shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of section 64443 (Radioactivity) of title 22 of the CCR, which is incorporated by reference into this Order. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.
4. Taste and Odor - Groundwater shall not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect the beneficial uses. For groundwater designated as MUN, at a minimum, concentrations shall not exceed adopted secondary maximum contaminant levels specified in:
  - a. Table 64449-A of section 64449 (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits), and

- b. Table 64449-B of section 64449 (Secondary Maximum Contaminant Levels- Ranges) of title 22 of the CCR,
- c. The above sections are incorporated by reference into this Order. This incorporation-by-reference includes future changes to these provisions as the changes take effect.

C. General Requirements and Prohibitions

1. The discharge of waste that causes violation of any narrative or numeric water quality objective contained in the Basin Plan is prohibited.
2. Where any numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.
3. The discharge of waste must not cause a pollution as defined in section 13050 of the California Water Code.
4. The discharge of waste must not cause a nuisance as defined in section 13050 of the California Water Code.
5. Storm water discharges that contain pollutants that cause or threaten to cause pollution, contamination, or nuisance as defined in section 13050 of the Water Code, are prohibited.
6. Collected screenings, filtration residues, or other solids removed as a result of bottled water production processes must be disposed of in a manner that does not result in a condition of pollution or nuisance.
7. The discharge of wastewater except to the authorized disposal site (percolation pond) is prohibited.
8. A minimum of two feet of freeboard must be maintained in the authorized disposal site (percolation pond) at all times.
9. The discharge of cooling tower water other than to the authorized disposal site is prohibited.
10. The discharge of domestic wastewater, sewage, or sewage effluent to land or groundwater is prohibited.
11. The discharge of waste to surface waters other than authorized disposal site, including domestic wastewater, sewage or sewage effluent, is prohibited.
12. Pre-production plastic materials (e.g., PET pellets) must be stored and handled in a manner such that they are not discharged to floor drains or storm water conveyances.
13. All industrial materials, cleaning, solvent, sanitizing, disinfectant, and anti-scalant solutions must be stored and handled such that they are not discharged to floor drains or storm water conveyances.
14. This Order does not authorize excavation/dredge and fill activities in waters of the United States.

15. This Order does not authorize storm water discharges associated with construction activities that disturb one acre or more of land, or construction activities that disturb less than one acre of land, but are part of a larger common plan of development, including the construction activities identified in the Master Plan. Such discharges are prohibited except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit.

## II. Provisions

### A. Standard Provisions

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment C, which is made part of this Order.

### B. Monitoring and Reporting

Pursuant to section 13267(b) of the California Water Code, the Discharger must comply with Monitoring and Reporting Program (MRP) No. R6V-2017-0006, as specified by the Executive Officer.

### C. Material Change in Discharge Characteristics

Material changes to the waste stream must be reported via email to [lahontan@waterboards.ca.gov](mailto:lahontan@waterboards.ca.gov) **within 5 business days** of the Discharger becoming aware of such changes. Material change is defined as changes in the source, character, location, or volume of the discharge, including but not limited to, the following:

1. Addition of a new process or product resulting in a change in the character of the waste;
2. Significant change in disposal method; e.g., change from land disposal to direct discharge to water, or change to industrial practices which would significantly alter the characteristics of the waste;
3. Significant change in the disposal area, e.g., moving the discharge to another drainage area, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems; or
4. Increase in wastewater flow rates to the percolation pond that result in inadequate pond capacity.

### D. Facility Expansion Report

**No later than 180 days prior to construction** of future phases of the Facility, the Discharger must submit to Water Board staff a Facility Expansion Report. The Facility Expansion Report shall include:

1. A narrative description of the planned expansion, such as square footage of additional construction; planned increased in number of bottling lines, additional cooling towers, etc.;
2. A schedule for construction;
3. Scaled engineering plans showing location(s) of construction, including increases in impervious surfaces, location(s) of new storm water treatment or control devices, or any changes to discharge points from the newly constructed facilities;
4. A list of applicable state and federal water pollution control permits required for construction, such as 401 Water Quality Certification, Notice of Intent to comply with the State Water Board's General Permit to Discharge Storm water Associated with Construction Activity, including submittal of a Storm water Pollution Prevention Plan;
5. The planned increases in wastewater discharge volumes to the authorized disposal site, and
6. Any anticipated changes to storm water volume as a result of additional impervious area constructed at the Facility.

E. Time Schedule Requirements

**No later than 45 days of this Order being issued:**

1. Submit a proposal to install automated continuous pH and flowmeters for each wastewater discharge point (i.e., all points discharging to the authorized disposal site). The proposal shall include:
  - a. A description and specifications of the type of meters selected;
  - b. Locations where each meter will be installed;
  - c. A description of each wastewater stream monitored by each meter;
  - d. A schedule for installation of the meters, and
  - e. A discussion of the accuracy, frequency of measurement, and resolution (i.e., smallest measurable increment) of the selected meters.
2. Submit a proposal to install, in the percolation pond, a water level gauge, sensor or other device to measure the depth of water in the pond. The proposal shall include:
  - a. A description and specifications of the type of gauge selected;
  - b. A schedule for installation of the gauge, and
  - c. A discussion of the accuracy and resolution (i.e., smallest measurable increment) of the selected gauge.



**No later than 60 days of this Order being issued:**

3. Submit a Storm Water Pollution Prevention Plan (SWPPP) describing facility-specific Best Management Practices (BMPs) to limit constituents in related wastes, or foreseeable breakdown byproducts from entering storm water. The SWPPP shall include, at a minimum, the following elements:
  - a. *Facility Information.* A list of site contacts including persons responsible for assisting with the implementation of the SWPPP.
  - b. *Site Map.* A site map that illustrates: the Facility boundaries; all storm water drainage areas within the Facility and the flow direction of each drainage area; locations of storm water collection and conveyance systems, including associated discharge locations and directions of flow; locations of storm water monitoring points; locations of structural control measures that affect run-on; and locations of all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, cleaning and material reuse areas, and other areas of industrial activity that may have potential pollutant sources.
  - c. *List of Industrial Materials.* A list of industrial materials handled at the Facility, the locations where each material is stored and handled, as well as the typical quantities and handling frequency.
  - d. *Potential Pollutant Sources.* A description of all potential pollutant sources including industrial processes, material handling and storage areas, dust and particulate generating activities, non-storm water discharges, and erodible surfaces.
  - e. *Best Management Practices.* A narrative description of each minimum and/or advanced BMP to be implemented at the Facility, as well as a summary table that identifies each area of industrial activity, the associated pollutant sources and pollutants, and the specific BMPs being implemented.
  - f. The following minimum BMPs must be implemented and maintained to reduce or prevent pollutants in storm water discharges: good housekeeping; preventative maintenance; spill and leak prevention response; material handling and waste management; erosion and sediment controls; an employee training program; and quality assurance and record keeping.
  - g. The following specific BMPs or equivalent measures must be implemented to limit the discharge of pre-production plastics in storm water:

- i. The Facility shall use durable sealed containers designed not to rupture under typical loading and unloading activities at all points of plastic transfer and storage.
- ii. The Facility shall use capture devices as a form of secondary containment during transfers, loading, or unloading Plastic Materials. Examples of capture devices for secondary containment include, but are not limited to catch pans, tarps, berms or any other device that collects errant material.
- iii. The Facility shall have a sweeping or vacuum or vacuum-type system for quick cleanup of fugitive plastic material available for employees.
- iv. The SWPPP shall include a program to train employees handling pre-production plastic materials. Training shall include environmental hazards of plastic discharges, employee responsibility for corrective actions to prevent errant plastic materials, and standard procedures for containing, cleaning, and disposing of errant plastic materials.

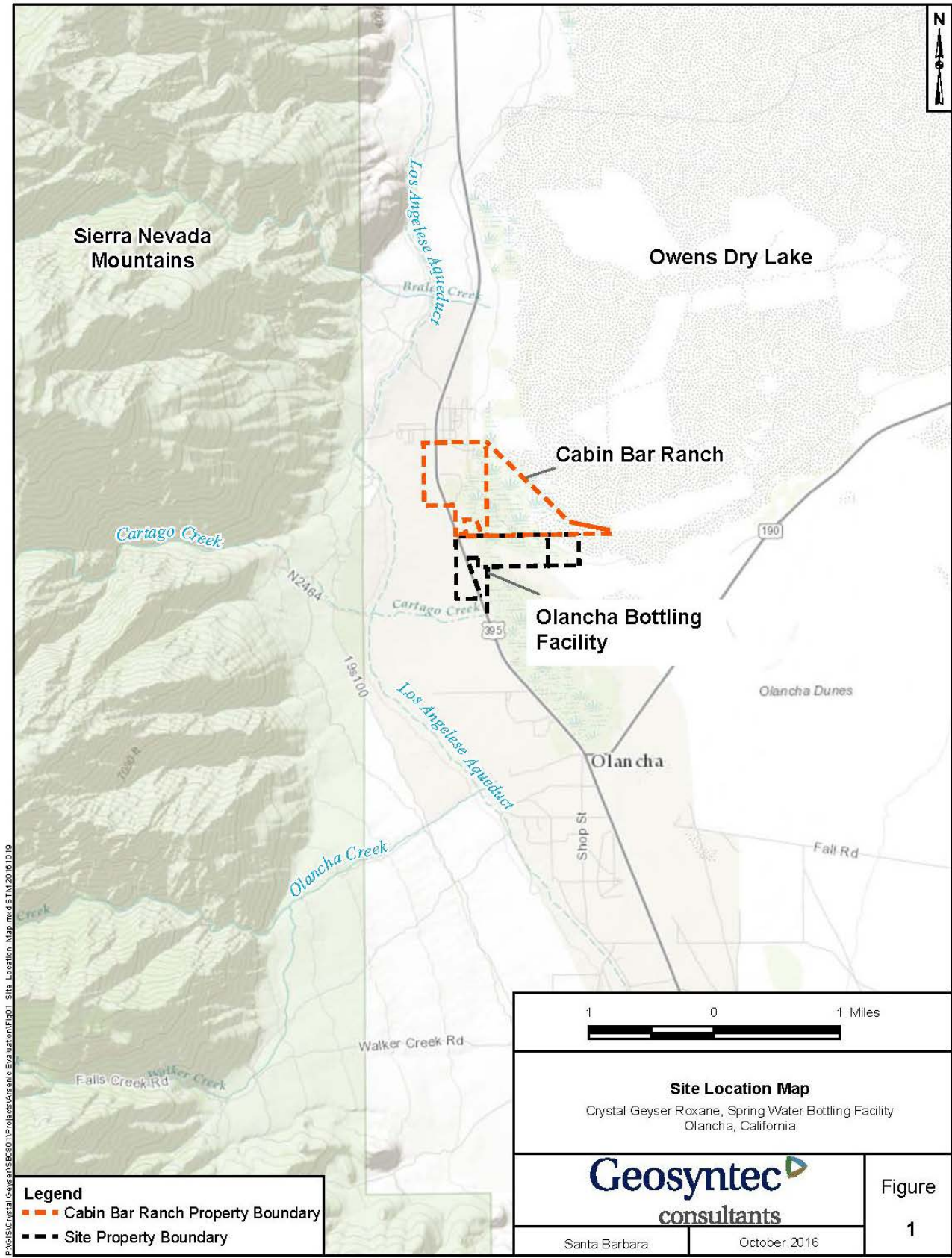
I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on January 11, 2017.



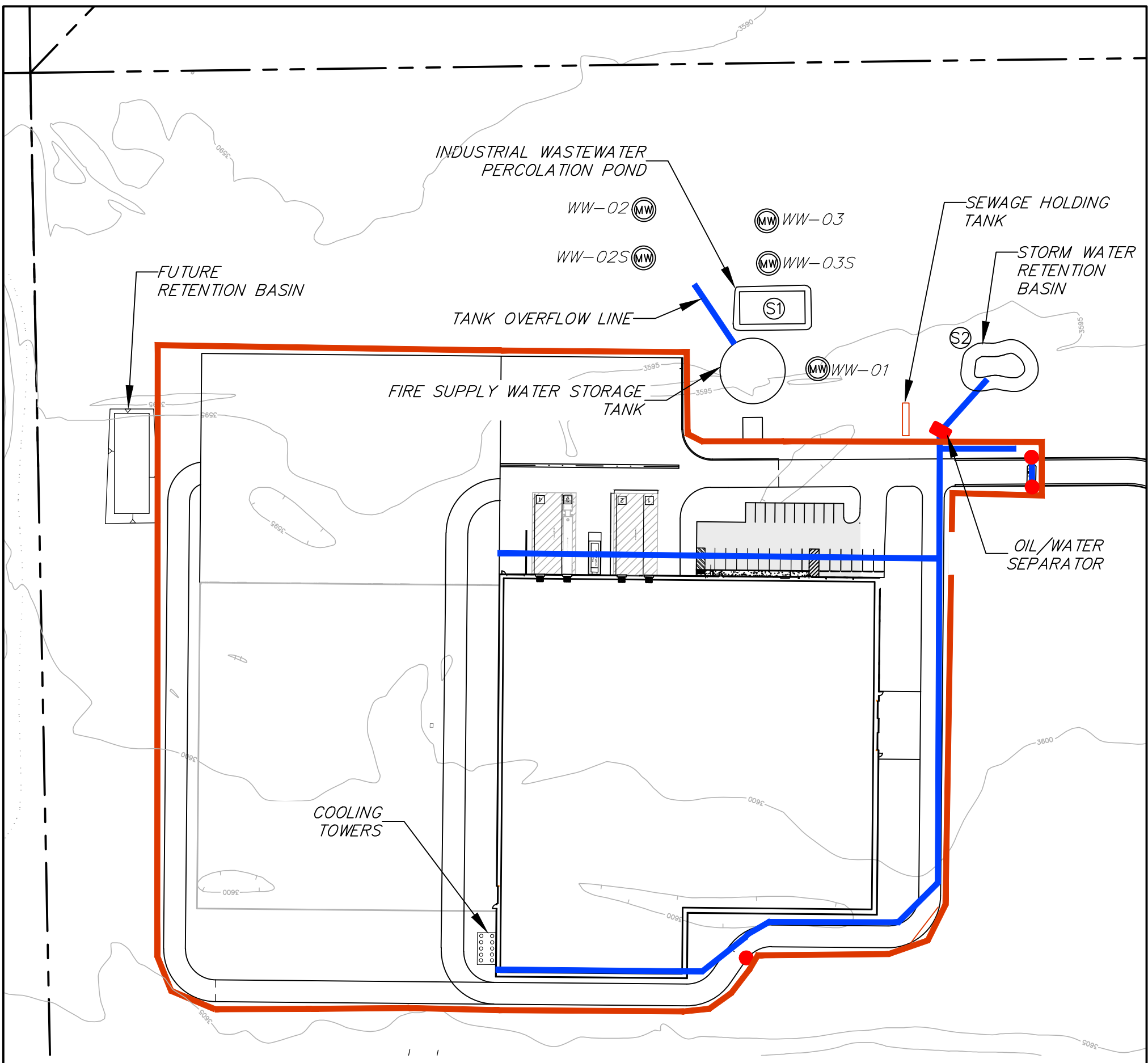
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PATTY Z. KOUYOUMDJIAN  
EXECUTIVE OFFICER

Attachments:           A. Location Map  
                              B. Facility Layout  
                              C. Standard Provisions for Waste Discharge Requirements



P:\GIS\CrystalGeyser\SE0001\Projects\ArsenicEvaluation\F001\_Site\_Location\_Map.mxd; STM:20161019



**LEGEND**

- MONITOR WELL
- SAMPLING POINT
- SITE BOUNDARY
- STORM DRAIN INLET
- DRAINAGE PIPE
- DRAINAGE AREA



GRAPHIC SCALE



( IN FEET )  
1 inch = 100 ft.

DATE 10/25/2016  
DRAWN MF  
JOB NO. 01.0915.4

**CRYSTAL GEYSER BOTTLING PLANT**  
**CABIN BAR WELL LOCATION MAP**

FIGURE 2



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**STANDARD PROVISIONS**  
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.

- e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.
- f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**MONITORING AND REPORTING PROGRAM NO. R6V-2017-0006**  
**WDID NO. 6B141306003**

FOR

**CRYSTAL GEYSER CABIN BAR RANCH WATER BOTTLING FACILITY**

Inyo County

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**I. GENERAL REQUIREMENTS**

A. Implementation, Overview of Reports Required

This monitoring and reporting program (MRP) is required pursuant to California Water Code section 13267 and is effective on the date it is signed by the Water Board's Executive Officer. Implementation will be according to the following schedule.

1. Groundwater monitoring shall be conducted quarterly (four times yearly) starting in the **second quarter monitoring period of 2017** (see MRP section IV.A for specific time frames).
2. Quarterly monitoring reports must include all parameters required by this MRP. The first quarterly report will be for the **April 1 – June 30, 2017** monitoring period, and is due by **August 15, 2017**. Quarterly reports are required after that date in accordance with section IV.A, below.
3. An annual storm water report must be submitted to the Water Board annually, and is due on **February 15 of each year**. MRP section IV.C describes the information that shall be included in the annual storm water reports.
4. Two-year groundwater trend analyses are due every two years. The first two-year trend analyses will cover the period for which monitoring data are available up to January 1, 2019, and is due on **February 15, 2019**. MRP section IV.D describes the information that shall be included in two-year trend analyses.

B. Certified Cover Letter

The Discharger must use MRP Attachment 1 as a cover letter and certification, or a cover letter containing the same information, for all reports provided to the Water Board in connection with this MRP.



C. Paperless Submission of Reports and Written Communications

1. The Discharger must submit all written communication and monitoring reports via e-mail to the following address [lahontan@waterboards.ca.gov](mailto:lahontan@waterboards.ca.gov). If the report or material is in excess of 50 MB, please submit that information on a disk (CD or DVD).
2. Reports or materials shall be in searchable Portable Document Format (PDF) format and must include a hyperlinked Table of Contents or other electronic bookmarking linked to all report sections including figures, tables, and appendices.

D. General Provisions

The Discharger must comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is made part of this MRP as Attachment 2.

E. Groundwater Data to be Uploaded to Geotracker Database

The groundwater sample data for the monitoring reports must be uploaded directly to the Geotracker database maintained by the Water Board. Contact the Water Board staff for uploading procedures and compliance assistance.

F. Sampling and Analysis Plan

By **March 1, 2017**, the Discharger must provide to the Water Board a Sampling and Analysis Plan (SAP) pursuant to provision 1d. of the General Provisions for Monitoring and Reporting, Attachment 2 of this MRP. Additionally, a copy of the SAP must be maintained at the Facility and available for inspection. The SAP must include a detailed description of procedures and techniques for:

1. Sample collection, sampling locations, sampling equipment, and decontamination of sampling equipment.
2. Collection of composite effluent samples which are representative of discharges to the authorized disposal site. The composite sampling period and minimum number of aliquots shall be specified. The composite sampling approach should propose either flow proportional or time proportional composites, and shall be justified based on the variation in discharge flow rates and effluent concentrations over a 24-hour time period.
3. Groundwater well purging methods and sample collection methods consistent with either the methods specified in section II.D., below, or consistent with the *Guidance Manual for Groundwater Investigations, revised 2008*, by CalEPA Department of Toxic Substances Control, or consistent with USEPA's

Groundwater Sampling Guidelines for Superfund and RCRA Project Managers of 2002, or subsequent revision, or the Discharger may propose a different purging method for acceptance by the Water Board's Executive Officer;

4. Sample preservation and shipment;
5. Analytical methods and procedures to be used;
6. Chain of custody and control of samples;
7. Quality assurance/quality control (QA/QC) for sample collection;
8. Frequency of calibration of any onsite equipment (e.g., pH meter, electrical conductivity meter, flow meter); and
9. Description of how onsite measurements are done.

## II. MONITORING REQUIREMENTS

### A. General Facility Monitoring Information

The following shall be **inspected weekly**, with results included in each quarterly report.

1. Visually inspect the percolation pond. Record:
  - a. The presence or absence of evidence of pond overtopping, erosion or other indication that the pond's capacity is insufficient,
  - b. The water level in the percolation pond to the nearest 0.1 foot,
  - c. The amount of freeboard (freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 foot), and
  - d. The presence or absence of foam, scum, or floating materials.
2. Visually inspect all chemical and pre-production plastics storage and handling areas for unauthorized discharges (e.g., leaks or spills).
3. Visually inspect sewage tank(s) for leaks or spills.
4. The Discharger shall maintain records of all visual observations, and provide such records upon request. Records shall include the date, approximate time, locations observed, presence and probable source of any observed problems such as spills, leaks, unauthorized discharges, control system failures, etc., name of person(s) that conducted the observations, and any response or corrective actions necessary in response to the visual observations.

**B. Flow Monitoring**

The Discharger shall measure and record the total daily and average monthly flow of wastewater discharged to the authorized disposal site (in gallons). Flow must be measured using continuous flowmeters installed as required by Waste Discharge Requirements section II.V.

**C. Effluent Monitoring**

1. The Discharger shall monitor the quality of effluent that is discharged to the percolation ponds. The Discharger, in its SAP, shall propose effluent monitoring locations which are representative of discharges from all wastewater processes to the percolation pond.
2. Samples shall be collected according to the frequencies specified in the table below.

<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>	<b>Sample Type</b>
Arsenic, dissolved and total (ppb)	parts per billion (ppb)	monthly	composite
CAM-17 metals, dissolved and total	ppb	monthly or annually <sup>1</sup>	composite
Total Dissolved Solids	parts per million (ppm)	monthly	composite
Flow	gallons per day and per month	daily	continuous flowmeter
pH	standard units, average daily	daily	continuous pH meter
Sulfate	ppm	monthly	composite
MBAS (foaming agents)	ppm	monthly	grab
Coliform organisms, total and fecal	MPN/100 milliliters	semi-annually (once every 6 months)	grab
VOCs/SVOCs*	ppb	monthly or	composite

<sup>1</sup> CAM-17 metals and disinfection byproducts (DBPs) shall be sampled monthly for a period of no less than six (6) months. If CAM-17 metals and DBPs are not detected above an applicable MCL, then the sampling period shall be changed to annually. Any annual detection exceeding an MCL in a sample shall result in the analysis frequency reverting back to monthly until six (6) consecutive events are again below an applicable MCL.

Parameter	Units	Frequency	Sample Type
		annually <sup>2</sup>	
Disinfection byproducts (DBPs) <sup>1</sup>			
Total trihalomethanes	ppm	monthly or annually	composite
5 haloacetic acids <sup>3</sup>	ppm	monthly or annually	composite
formaldehyde	ppm	monthly or annually	composite
Bromate	ppm	monthly or annually	composite
Chlorite	ppm	monthly or annually	composite
Total residual chlorine	ppm	monthly	composite

\*Volatile organic compounds/Semi-volatile organic compounds

D. Clean-in-Place (CIP) System Flushing Onsite Monitoring

Prior to releasing discharges from the CIP system, measure, using an onsite analyzer, pH levels. Measurements shall be made no less than once per 200 gallons of CIP system water discharged. Record pH measurements and gallons of water discharged.

E. Groundwater Monitoring

Groundwater monitoring shall consist of the following:

1. Groundwater Monitoring Locations

- a. The following monitoring well locations shall monitor groundwater quality and groundwater elevations upgradient and downgradient of the percolation pond.

Location	Monitoring Wells
Upgradient	WW-1
Downgradient, south	WW-2/2S
Downgradient, north	WW-3/3S

<sup>2</sup> VOCs/SVOCs shall be sampled monthly for a period of no less than six (6) months. If VOCs/SVOCs are not detected in six (6) consecutive sampling events, VOC/SVOC analysis frequency shall be changed to annually (once every twelve months). Any annual detection of VOCs/SVOCs in a sample shall result in the analysis frequency reverting back to monthly until six (6) consecutive events are again non-detect. The Discharger may present evidence if it believes that a low level detection of VOCs/SVOCs is the result of laboratory contamination or sampling error and is not a result of waste discharge.

<sup>3</sup> Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Bromoacetic acid, Dibromoacetic acid.

- b. These well locations shall be monitored quarterly according to the schedule in MRP section IV.
  - c. If new monitoring wells are installed to evaluate effects of discharges authorized by this Order, they will be added to this monitoring program and sampled on a quarterly basis unless otherwise specified by the Water Board's Executive Officer.
2. Groundwater Elevation and Depth to Water

Determine the groundwater elevation with respect to mean sea level and the depth to water in feet below ground surface for each monitoring well prior to purging for sampling.

3. Groundwater Direction and Gradient

Using groundwater elevation data, determine the groundwater flow direction and gradient and present it on a scaled map in each quarterly monitoring report.

4. Purging

- a. Groundwater samples must be collected after either of the following: 1) an amount of water equal to three times the amount of water within the well casing has been removed, or 2) the temperature, electrical conductivity, and pH measurements of the water in the well have stabilized to approximately  $\pm 10$  percent for successive measurements after a minimum of one well volume has been removed. For each purging method, the groundwater elevation must recover before the sample is collected. Other purging methods may be used if it is described in the site SAP and accepted by the Water Board's Executive Officer.
- b. If a monitoring well is purged, and does not appear to be recovering to pre-purging elevations, the Discharger must document the amount of time allowed for the well to recover, the volume of water removed, and the groundwater elevation at the time of the sample collection. If the monitoring well does not recover within one hour after purging, the Discharger must document the volume of water removed and may return the next day and attempt to collect the sample from the well without further purging. Measurements of temperature, electrical conductivity, and pH during purging must be reported with the results of groundwater analyses.
- c. Well casing diameter, well depth, presence of and depth to groundwater, and total volume purged prior to sampling must also be reported with the groundwater monitoring results.

5. Groundwater Sampling

Groundwater monitoring wells must be sampled quarterly for the parameters listed below, except as footnoted for CAM-17 metals and VOCs/SVOCs.

Parameter	Units	Method
Temperature	C or F	Field measurement
Electrical Conductivity/Specific Conductance	µS/cm or µmho/cm	Field measurement
Dissolved oxygen	ppm	Field measurement
pH	pH units	Field measurement
TDS	ppm	Laboratory
Alkalinity	ppm	Laboratory
Arsenic, dissolved and total	ppb	Laboratory
CAM-17 metals, dissolved and total <sup>4</sup>	ppb	Laboratory
VOCs/SVOCs <sup>5</sup>	ppb	Laboratory

**III. STORM WATER POLLUTION CONTROL MONITORING AND RESPONSE PROGRAM**

A. Storm Water Monitoring

1. Monitoring Points

The storm water discharge monitoring locations shall be selected such that samples collected are representative of storm water discharge leaving each drainage area identified for the Facility. The storm water discharge monitoring locations must be identified on the site plan in the SWPPP.

2. Storm Water Sampling

The Discharger shall collect storm water samples from each storm water discharge monitoring location and analyze for the following monitoring parameters:

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<sup>4</sup> CAM-17 metals in groundwater shall be sampled for four (4) consecutive quarters. If CAM-17 metals are not detected in effluent sampling for six (6) months, then the groundwater sampling frequency for CAM-17 metals shall be reduced to annually following four (4) consecutive quarterly monitoring events. This reduction shall not be applied to arsenic monitoring.

<sup>5</sup> VOCs/SVOCs analysis shall be conducted only if effluent sampling indicates a detection of such constituents.

Parameter	Units	Sampling Frequency	Reporting Frequency
pH	pH Units	Four qualifying storm events per year <sup>6</sup>	Annually
Turbidity	NTUs		
Oil and Grease, Total	ppm		
Iron, Total	ppm		

### 3. Visual Observations

- a. Monthly, the Discharger shall visually observe and document, during dry weather conditions and normal operating hours, each drainage area for the following: the presence or indications of prior, current, or potential non-storm water discharges and their sources; authorized non-storm water discharges, their sources, and associated BMPs; and all potential pollutant sources.
- b. Visual observations shall also be conducted at the same time that storm water sampling occurs. At the time a storm water sample is collected, the Discharger shall observe and document the discharge for the following:
  - i. Visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris including pre-production plastics, and source(s) of any discharged pollutants.
  - ii. In the event that a discharge location is not visually observed during the sampling event, the Discharger shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.

### 4. Water Quality Thresholds

The specific water quality thresholds that apply to the storm water monitoring parameters are listed in the table below. The numeric benchmarks are "not to exceed" values.

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<sup>6</sup> A qualifying storm event is a precipitation event that produces a storm water discharge for at least one drainage area and is preceded by 48 hours with no discharge from any drainage area. The Discharger shall collect and analyze storm water samples from two qualifying storm events within the first half of each monitoring period (Jan 1 to June 30) and from two qualifying storm events within the second half of each reporting year (July 1 through December 31). If a sufficient number of qualifying storm events do not occur within a given monitoring period, the Discharger must document and report that information in annual reports.

Storm Water Monitoring Benchmarks.

<b>STORM WATER MONITORING</b>	
<b>Parameter</b>	<b>Benchmark Value</b>
pH	Between 6.5 and 8.5 pH units
Turbidity	500 NTUs
Oil and Grease, Total	15 mg/L
Iron, Total	1.0 mg/L

**B. Data Evaluation and Response Actions**

1. The storm water monitoring data (storm water sampling and analytical data and visual observations) must be evaluated to determine the following: the effectiveness of best management practices (BMPs) in reducing or preventing pollutants in the storm water discharges; compliance with the monitoring parameter water quality thresholds; and the need to implement additional BMPs and/or SWPPP revisions.
2. The results of all storm water sampling and analytical results from each distinct sample must be directly compared to the water quality threshold for the corresponding monitoring parameter. An exceedance of one or more water quality threshold requires the Discharger to implement the following response actions:
  - a. The Discharger shall notify the Water Board, verbally or via email, within 30 days of obtaining laboratory results whenever a determination is made that a water quality threshold is exceeded for one or more storm water monitoring parameters;
  - b. Identify the pollutant sources that may be related to the exceedance and whether the BMPs in the SWPPP have been properly implemented and perform BMP maintenance, if necessary;
  - c. Assess the SWPPP and its implementation to determine whether additional BMPs or SWPPP measures are necessary to reduce or prevent pollutants in storm water discharges and implement such changes as soon as practicable; and
  - d. Revise or amend the SWPPP, as appropriate, to incorporate the additional BMPs or SWPPP measures necessary to reduce or prevent pollutants in storm water discharges no later than 60 days of obtaining laboratory results of the reported exceedance; or
  - e. Demonstrate, to the satisfaction of the Executive Officer, that the exceedance(s) is attributed solely to non-industrial pollutant sources and/or to natural background sources.



#### IV. REPORTING REQUIREMENTS

##### A. Schedule and Signatories

1. The Discharger shall submit the following reports according to the schedule in the table below.
2. All reports shall include a signature that complies with the General Provisions for Monitoring and Reporting verifying statements in the report, laboratory and other sampling results, and work conducted at the site.

Reporting Period	Monitoring Period	Due Date
1 <sup>st</sup> quarter, monitoring	Jan 1 – March 31	May 15, annually
2 <sup>nd</sup> quarter, monitoring	April 1 – June 30	August 15, annually
3 <sup>rd</sup> quarter, monitoring	July 1 – September 30	November 15, annually
4 <sup>th</sup> quarter, monitoring	October 1 – December 31	February 15, annually
Annual, SWPPP	Jan 1 – December 31	February 15, annually
2-year, groundwater trend analysis (see MRP section IV.C)	Up to January 1, 2019, and every 2 years thereafter	February 15, every two years

##### B. Quarterly Reporting Requirements

Quarterly reports must include information specified below.

1. A letter transmitting the essential points of each report, including a discussion of any violations found since the last report was submitted and describing actions taken or planned for correcting those violations. Discuss any deviations from the Facility's approved SAP.
  - a. If the Discharger has previously submitted a detailed time schedule for correcting violations, a reference to the correspondence transmitting this schedule will suffice.
  - b. If no violations have occurred since the last submittal, this must be stated in the letter of transmittal.
2. Map(s) showing the Facility location and boundaries, location of the Spring Line Fault, all monitoring locations, storm water drainage areas and capture locations, percolation pond location, sewage holding tanks, cooling tower locations, and wastewater discharge points.

3. A map showing the static groundwater surface elevation (feet above mean sea level) in each groundwater monitoring well, the groundwater gradient (feet/feet) and the direction of the groundwater gradient beneath and around the Facility, the velocity of groundwater flow (feet/year), and the current groundwater isocontours for that monitoring period. Groundwater isocontours should be drawn using all available data representing the monitoring period.
4. Maps shall have a font size of no less than 9 points and include a scale and legend. All maps shall be in color, with legible color-coded symbols to easily discern the information provided. Map contents shall be consistent between each map, including color, symbols, and where possible, base map information.
5. Tabular presentation of all effluent and groundwater monitoring data obtained for the monitoring period, including all previous (past two years) and current reporting period data. Tabulated results of laboratory analyses for each sampling point and constituent for the monitoring period shall be compared with the effluent, receiving water limit, MCL or SMCL for each monitoring parameter and each sample that exceeds its respective limit at any given monitoring point shall be indicated in the table (e.g., bold font or shaded cells).
6. Tabular presentation of onsite measurements of pH taken during CIP system flushing events. Report the gallons of water discharged during flushing events.
7. Tabular presentation of flow monitoring of wastewater discharged to the percolation pond, in gallons per day and average gallons per month.
8. Tabular presentation of water levels and freeboard in the percolation pond. Discuss the performance of the percolation pond in infiltrating all wastewater discharged.
9. Discuss any modification, replacement, additions, or any major maintenance conducted on the wastewater flow measuring equipment, sewage holding tanks, percolation pond, or wastewater control or treatment facilities during the reporting period. Provide a brief chronological summary of dates of any operational problems and maintenance activities that may impact water quality at the Facility.
10. Provide descriptions of any operational problem(s) and corrective action(s) taken to address the problem(s).
11. Include appendices for boring logs and well designs for any wells installed during the quarter.

12. Include appendices of laboratory analysis reports and field notes.
13. Report the date and quantity of sewage removed from holding tanks. The name of the company removing the material must also be reported, in addition to the name and location of the facility receiving the material.
14. The Discharger is required to review the effluent data collected and self-report any violation of an effluent limit in WDRs section I.A.
15. The Discharger is required to review the groundwater data collected and self-report any violation of a receiving water limitation in WDRs section I.B.

C. Storm Water Pollution Prevention Plan Reporting

SWPPP monitoring shall be included as a separate section in each fourth quarter report (due February 15 of each year). SWPPP reporting must include, but not be limited to, the following information:

1. All data collected during the reporting period in accordance with the storm water monitoring plan.
2. Tabulated results of sampling and laboratory analyses for each storm water discharge monitoring location, including historic and current reporting period data, as well as the water quality threshold for each monitoring parameter and an identification of each sample that exceeds its respective water quality threshold at any given discharge monitoring location. Provide dates and rainfall amount (in inches per hour) for each qualifying storm event which triggers storm water sampling.
3. A copy of the current site map from the SWPPP.
4. Copies of all field monitoring, storm water sampling, and visual observation data sheets. An explanation shall be provided for uncompleted sampling event visual observations.
5. Calibration methods and any discrepancies of any meters used for field parameter evaluations after calibration is performed.
6. A summary of the actions taken in response to a water quality threshold exceedance, including monitoring parameter and pollutant source(s) involved, additional BMP and/or SWPPP measures taken, and associated dates and timelines for implementing the response action; or a demonstration that the exceedance(s) is attributed to a non-industrial pollutant source and/or to a natural background source.
7. A copy of any SWPPP amendments and/or revisions for the reporting period.

8. A summary of significant spills and/or leaks that occurred at the Facility during the reporting period and the response taken by the Discharger, including dates.
9. Volume of oil and sludge removed from oil/water separators, and manner and method of disposal. Include waste removal manifests in an appendix.
10. A summary of employee trainings performed during the reporting period, including dates and content.

D. Two-Year Data Analysis Review

1. By **January 15, 2018**, the Discharger must produce for acceptance by the Water Board's Executive Officer, a procedure to analyze and review the groundwater data on a two-year basis. The review and analysis may be accomplished by comparing upgradient and downgradient monitoring well data, intrawell statistical analysis, interwell statistical analysis, or other method. The analysis procedure must provide a method to determine if the groundwater data indicates a degrading trend in the groundwater quality.
2. The Discharger must review all the groundwater data collected during the previous two years and conduct an analysis on the data as proposed and accepted, above, and identify any trends regarding constituent concentrations that may be associated with the Facility's discharge. The analysis shall be included as a separate section in the first quarterly monitoring report submitted at two-year intervals (i.e., 2019, 2021, 2023, etc.).
3. The Discharger must determine and certify that the groundwater monitoring data has not shown an increase for the monitored constituents. If the certification cannot be provided because an increase is detected, the Discharger is required to notify the Water Board within 5 days of identifying the conditions.

*Patty Z. Kouyoumdjian*

Ordered By: \_\_\_\_\_  
PATTY Z. KOUYOUMDJIAN  
EXECUTIVE OFFICER

Date January 11, 2017

Attachment 1 Monitoring Report Cover Sheet  
Attachment 2 General Provisions for Monitoring and Reporting Program



**b) Section(s) of WDRs/NPDES Permit Violated:**

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**c) Reported Value(s) or Volume:**

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**d) WDRs/NPDES Limit/Condition:**

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**e) Date(s) and Duration of Violation(s):**

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**f) Explanation of Cause(s):**

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**g) Corrective Action(s)**  
(Specify actions taken and a schedule for actions to be taken)

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact \_\_\_\_\_ at the number provided above.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

## ATTACHMENT 2

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

#### **GENERAL PROVISIONS** FOR MONITORING AND REPORTING

##### 1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
  - i. Standard Methods for the Examination of Water and Wastewater
  - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal

the discharge period, or 24 hours, whichever period is shorter.

## 2. OPERATIONAL REQUIREMENTS

### a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

### b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

## 3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
  - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
  - ii. In the case of a partnership, by a general partner;



- iii. In the case of a sole proprietorship, by the proprietor; or
  - iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
- i. Name and telephone number of individual who can answer questions about the report.
  - ii. The Monitoring and Reporting Program Number.
  - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

#### 4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.