

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6T-2016-0036
WDID NO. 6A180208004

REVISED WASTE DISCHARGE REQUIREMENTS
FOR

HERLONG PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT AND DISPOSAL FACILITY

Lassen County_____

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

1. Discharger

The Herlong Public Utility District is the owner and operator of the Herlong Public Utility District Wastewater Treatment and Disposal Facility. For the purpose of this Order, the Herlong Public Utility District is referred to as the “Discharger.”

2. Facility

The Herlong Public Utility District Wastewater Treatment and Disposal Facility discharges treated domestic wastewater to onsite infiltration basins. For the purpose of this Order, the Herlong Public Utility District’s Wastewater Treatment and Disposal Facility is referred to as the “Facility.”

3. History of Previous Regulation by the Water Board

Waste discharge requirements (WDRs) were previously established for the Facility under Board Order No. R6T-2003-0018, which was adopted on May 21, 2003.

4. Reason for Action

The Discharger filed a Report of Waste Discharge on June 1, 2015, requesting that the WDRs for the Facility be revised to incorporate proposed Facility and operational modifications. The two modifications include:

- a. Installing a mechanical screening system between the influent pump station and the oxidation ditch treatment system.
- b. Re-designate the existing effluent reuse storage pond identified in Board Order No. R6T-2003-0018, as a seventh infiltration basin for wastewater disposal.

Neither of the proposed modifications will change the wastewater discharge rate authorized by Board Order No. R6T-2003-0018.

The Water Board is also incorporating a new effluent limitation for total nitrogen. This action is being taken to reflect the project description provided in the California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) prepared for the Facility, which provided, in part, the basis for the EIR's environmental impacts analysis and conclusion that impacts to water quality would be less than significant.

5. Facility Location

The Facility is located forty miles southeast of the City of Susanville, approximately three miles south-southeast of Honey Lake, near the communities of Herlong and West Patton Village. The Facility is located in the southeast quarter of Section 28, T27N, R17E, MDB&M. The Facility location is shown in Attachment "A," which is made part of this Order.

6. Description of Facility and Discharge

The Facility is designed to treat and dispose of up to 0.375 million gallons of wastewater per day. The Facility's primary wastewater supply is from a nearby federal penitentiary, in addition to smaller residential wastewater flows from the nearby communities of Herlong and West Patton Village. The Facility does not receive any wastewater from the Sierra Army Depot.

The Facility produces secondary-treated effluent and discharges the effluent into onsite infiltration basins. The Facility's treatment system consists of influent pumps, a mechanical screening system, an activated sludge oxidation ditch, and a secondary clarifier. The treatment system's oxidation ditch and secondary clarifier include aerobic and anoxic zones, which aid in removing total nitrogen through nitrification and denitrification of the wastewater. The effluent from the secondary clarifier is discharged to one of seven infiltration basins. The Facility and its treatment and disposal components are shown in Attachment "B," which is made a part of this Order.

The secondary clarifier also produces biological sludge that undergoes treatment in an aerobic digester. Treated sludge typically is dewatered by a filter press. Facility operators can also use the Facility's sludge drying beds to dewater the sludge following treatment. The sludge drying beds consist of a layer of sand overlying an impermeable high density polyethylene (HDPE) liner with a subsurface drain. Liquid from both dewatering systems is returned to the wastewater treatment system.

The Facility also has a chlorine-based disinfection system that is intended to be used to produce treated wastewater for recycled uses. Operating the Facility's chlorine-based disinfection system is not authorized by this Order. The Discharger must apply for either individual or general waste discharge requirements for operating the chlorine-based disinfection system and/or for the production, distribution, and/or use of recycled wastewater.

7. Sludge Disposal

Dewatered sludge is temporarily stored onsite in dumpsters, and then transported to an offsite facility authorized to receive such waste.

8. Authorized Disposal Site

The authorized disposal site for treated wastewater is within the seven infiltration basins, as shown in Attachment "B."

9. Site Geology

The Facility lies in a basin-fill valley at the junction of the Sierra Nevada Province and the Modoc Plateau. The valley is bordered by the Skedaddle and Amedee Mountains to the northeast, the Fort Sage and Virginia Mountains to the southeast, the Diamond Mountains to the south and southwest, and the Shaffer and Antelope Mountains to the north. The substrata at the authorized disposal sites consist of unconsolidated and semi-consolidated lacustrine and fluvial deposits of clay, silt, sand, and gravel. The subsurface soils consist largely of silty sands, clayey sands, and gravelly sands. The infiltration rate of the soils is variable, but averages approximately 1.2 inches per hour.

10. Site Hydrology

The Facility is located within the Herlong Hydrologic Area of the Susanville Hydrologic Unit on mildly sloping terrain within an alluvial valley at an elevation of approximately 4,000 feet. Rainfall and snowmelt are primary sources of runoff from the Facility. The annual precipitation in the area is approximately ten inches. Ephemeral drainage channels exist in the area that may be potential receiving waters for any unauthorized waste discharges. Honey Lake is located approximately three miles west and down gradient from the Facility.

11. Site Hydrogeology

The Facility is located within the Honey Lake Valley groundwater basin, a 490-square mile basin with internal drainage, which stores an estimated 16 million acre-feet of water (California Dept. of Water Resources, *California's Ground Water, 1975*). The groundwater of the Honey Lake Valley groundwater basin is the receiving water for the Facility's treated wastewater discharges. Groundwater quality within this basin is listed as intermediate in the *State Water Resources Control Board 1992 Water Quality Assessment*, indicating that beneficial uses are supported while there is occasional degradation of water quality by natural or nonpoint-source pollutants.

The local groundwater flow direction follows the surface topography, generally northwest towards Honey Lake. The median hydraulic conductivity of the basin-fill deposits and volcanic rocks has been estimated to be approximately eight feet per day based on production test wells and the descriptions of geologic materials in the basin.

12. 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.

13. Groundwater Beneficial Uses

The beneficial uses of the groundwater of the Honey Lake Valley Groundwater Basin (Department of Water Resources No. 6-4), 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)

14. 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.

15. California Code of Regulations Title 27

CCR title 27, section 20090, defines the activities that may be exempt from CCR title 27 requirements. The section provides a list of preconditions that must be met for the exemptions to apply. Section 20090(a) is applicable to the discharge of wastewater to land. The full text of the exemption follows:

"(a) Sewage - Discharges of domestic sewage or treated effluent which are regulated by WDRs issued pursuant to Chapter 9, Division 3, Title 23 of this code, or for which WDRs have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal wastewater treatment plants, provided that residual sludges or solid waste from wastewater treatment facilities shall be discharged only in accordance with the applicable SWRCB [State Water Resources Control Board]-promulgated provisions of this division."

The Facility's discharge has historically been regulated under WDRs issued pursuant to CCR, title 23. The Discharger has been required to monitor the groundwater potentially affected by the Facility, and the groundwater monitoring data shows the groundwater quality is consistent with applicable water quality objectives.

Sludge disposal is addressed in Finding No. 7, above. The Discharger is required by this Order to continue satisfying the title 27 exemption criteria requiring that any sludge generated in the treatment of the domestic wastewater will be properly removed and disposed of at a facility authorized to accept the waste. The discharge activity meets the preconditions in section 20090(a) and is exempt from title 27.

16. 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 expanding the treated wastewater discharge area, but does not increase the discharge rates or volumes authorized by Board Order No. R6T-2003-0018. Therefore, there is no increase in pollutant loading to the groundwater above that authorized by Board Order No. R6T-2003-0018. Further, there is no additional groundwater degradation anticipated beyond that authorized under Board Order No. R6T-2003-0018, as a result of expanding the treated wastewater discharge area.

The Discharger has been operating the Facility for several years, and has conducted groundwater monitoring around the Facility. The monitoring has detected some increases in chloride, total nitrogen, and total dissolved solids attributed to the Facility's discharge. Down gradient chloride concentrations remain below secondary drinking water standards, and down gradient total nitrogen concentrations are only intermittently detected at low levels. Down gradient total dissolved solids concentrations are increasing from, on average, below 500 mg/L in up gradient wells to between 500 mg/L and 1,000 mg/L, which represent secondary maximum contaminant levels (MCLs) for drinking water.

The Discharger is required to continue monitoring groundwater quality to assess the impacts of the authorized discharge upon groundwater quality. The monitoring program is intended to provide data that will allow the Discharger to implement measures in a timely manner to prevent groundwater quality degradation.

This Order continues to require the Discharger to maintain the best practicable treatment or control in order to prevent a condition of pollution or nuisance. Some localized degradation that does not impair the water quality for beneficial uses is expected to continue, but is consistent with the maximum benefit to the people of the state in order to provide practical and economical waste disposal for this community.

17. Water Code Section 13241 Considerations

Pursuant to 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 affected by the discharge. Present or probable future beneficial uses of the water include municipal and domestic water supply, agricultural supply, freshwater replenishment, industrial service supply, and wildlife habitat, which should not be adversely affected by the discharge, and will be maintained.

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. Finding Nos. 9, 10, and 11, 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.

The requirements for the Facility are reasonable to achieve. The Discharger will be required to meet new effluent standards that will further protect the groundwater from nitrogen-related degradation. It is anticipated that groundwater quality will be maintained for beneficial uses through compliance with this Order. The water quality in the vicinity of the Facility is not subject to other controllable factors.

d. Economic considerations.

This Order establishes a new effluent limitation for total nitrogen. The Discharger has already demonstrated that it can comply with the new effluent limitation, and has confirmed that it has the economic capability to continue complying with the new effluent limitation and to conduct the additional monitoring related to the new effluent limitation. The costs of complying with and monitoring to verify compliance with the new effluent limitation is considered reasonable.

e. The need for developing housing within the region.

The Discharger provides wastewater treatment services for the surrounding community even though not all of the community has connected to the sewer system. Much of the community is rural and there is ample area for septic tanks and leach fields. If the density of urban housing increases, the Discharger's infrastructure will be vital to meet the demands of higher density housing and the need for additional wastewater treatment and disposal. The continued use and future expansion of the Facility may support development of future housing in the local area.

18. 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" and requires the water boards to consider this state policy when revising, adopting, or establishing regulations, including waste discharge requirements. This Order does consider the human right to water and does not authorize the degradation of the groundwater beyond the level that supports beneficial uses, and requires monitoring to assess the extent of any water quality degradation associated with the Facility's discharge.

19. California Environmental Quality Act

On December 19, 2002, Lassen County Board of Supervisors certified a Final Environmental Impact Report (EIR), State Clearinghouse No. 2001022019, for the Discharger's Water and Wastewater Systems Project (Project), in accordance with the California Environmental Quality Act (CEQA), Public Resources Code, sections 21000, et seq.). The County Board of Supervisors found that the Facility would have a less than significant impact upon the environment, including water quality.

The Water Board, acting as a CEQA Responsible Agency in compliance with CCR, title 14, section 15096 (g)(2), used its independent judgment to evaluate the significant and potentially significant impacts to water quality identified in the Final EIR for the Project. The Water Board finds the mitigation measures in the Final EIR to be adequate to reduce significant or potentially significant water quality impacts to less than significant levels. This Order implements the mitigation requirements for nitrogen in the discharge.

20. Notification

The Water Board staff placed a copy of the Tentative WDRs on the Water Board's internet site on April 4, 2016, and distributed it to the Discharger and known interested parties.

21. Consideration of Public Comments

The Water Board, in a public meeting, 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 into the Facility must not exceed 11.625 million gallons per month.

2. Wastewater discharged to the authorized disposal sites must not contain the pollutants at concentrations in excess of the following limits:

Parameter	Units	Mean ¹ Quarterly	Maximum
Biochemical Oxygen Demand (BOD)	mg/L	30	45
Total Suspended Solids (TSS)	mg/L	30	45
Total Nitrogen ²	mg/L	10	--

1. The arithmetic mean of lab results for all effluent samples collected during the quarter; if only one sample is taken then that sample comprises the mean. The Discharger may collect additional samples in any month to calculate the mean.
2. Total nitrogen as N analysis; the result must include nitrate-nitrite, and total Kjeldahl nitrogen

3. Wastewater discharged to the authorized disposal areas must have a pH of not less than 6 pH units or more than 9 pH units.

B. Receiving Water Limitations

The discharge of waste must not cause the presence of the following substances or conditions in the groundwater of the Honey Lake Valley groundwater basin.

1. Bacteria, Coliform - In groundwater designated as MUN, the median concentration of 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, below:
 - 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. 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).

The above sections are incorporated by reference into this Order. This incorporation-by-reference is prospective including future changes to these provisions as the changes take effect.

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,

The above sections are incorporated by reference into this Order. This incorporation-by-reference is prospective including future changes to these provisions as the changes take effect.

C. General Requirements and Prohibitions

1. The discharge of waste that causes a 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. There must be no discharge, bypass or diversion of raw or partially treated sewage, sewage sludge, grease or oils from the collection, treatment, or disposal facilities to adjacent land areas or surface waters.
4. The discharge must not cause pollution as defined in section 13050 of the Water Code.
5. The treatment or discharge must not cause a nuisance as defined in section 13050 of the Water Code.
6. The discharge of wastewater except to the authorized disposal site described in Finding 8, above, and shown in Attachment B is prohibited.

7. The integrity of any treatment and disposal systems must be maintained throughout the life of these systems and must not be diminished as the result of any maintenance or cleaning operation.

II. Provisions

A. Rescission of Waste Discharge Requirements

Board Order No. R6T-2003-0018 is hereby rescinded.

B. Standard Provisions

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

C. Monitoring and Reporting

Pursuant to section 13267(b) of the Water Code, the Discharger must comply with Monitoring and Reporting Program No. R6T-2016-TENT as specified by the Executive Officer.

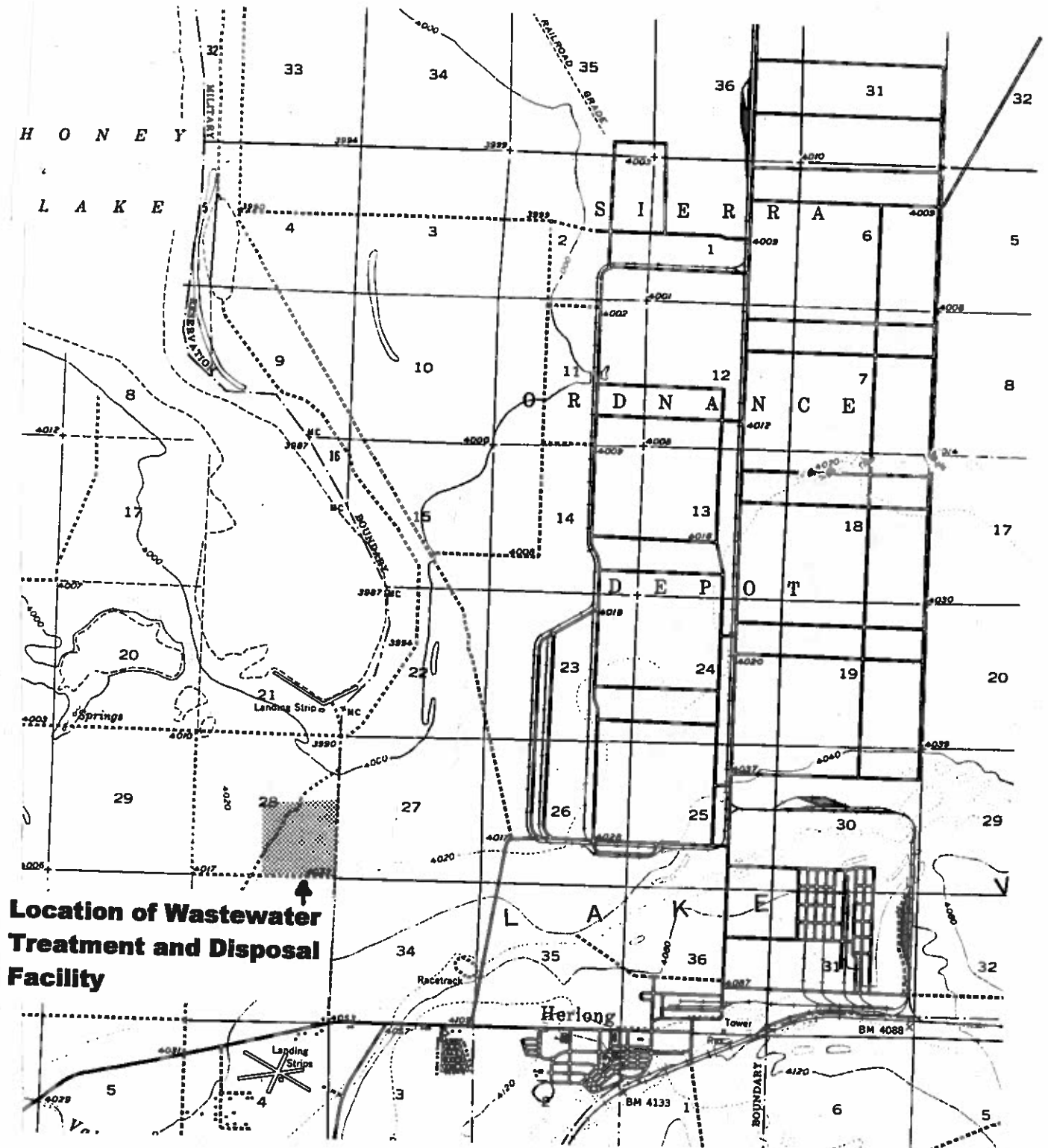
I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on June 9, 2016.



PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

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

Attachment "A"
Location Map
Herlong Utilities Cooperative
Wastewater Treatment and Disposal Facility



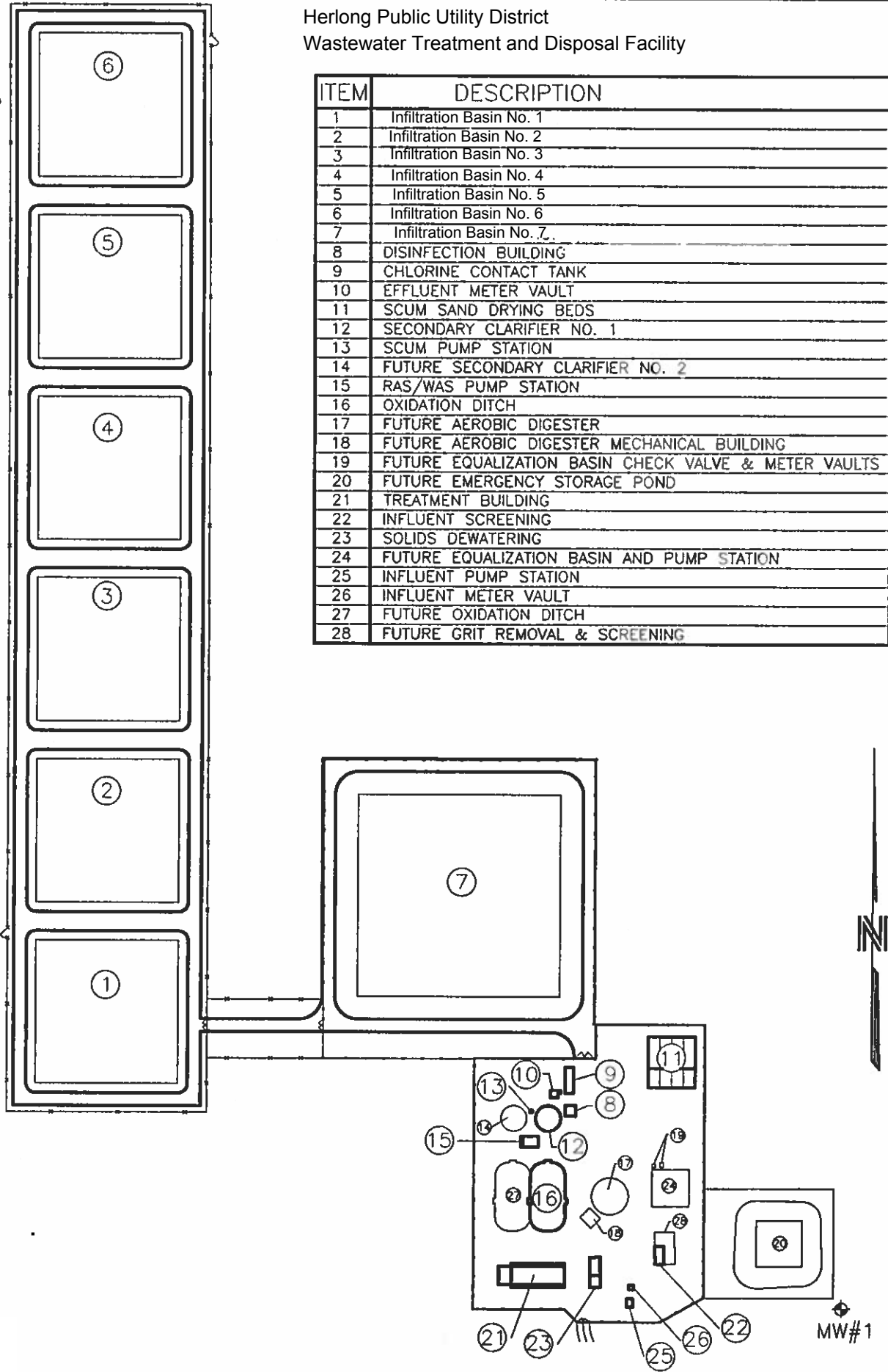
Attachment "B"

Herlong Public Utility District
Wastewater Treatment and Disposal Facility

ITEM	DESCRIPTION
1	Infiltration Basin No. 1
2	Infiltration Basin No. 2
3	Infiltration Basin No. 3
4	Infiltration Basin No. 4
5	Infiltration Basin No. 5
6	Infiltration Basin No. 6
7	Infiltration Basin No. 7
8	DISINFECTION BUILDING
9	CHLORINE CONTACT TANK
10	EFFLUENT METER VAULT
11	SCUM SAND DRYING BEDS
12	SECONDARY CLARIFIER NO. 1
13	SCUM PUMP STATION
14	FUTURE SECONDARY CLARIFIER NO. 2
15	RAS/WAS PUMP STATION
16	OXIDATION DITCH
17	FUTURE AEROBIC DIGESTER
18	FUTURE AEROBIC DIGESTER MECHANICAL BUILDING
19	FUTURE EQUALIZATION BASIN CHECK VALVE & METER VAULTS
20	FUTURE EMERGENCY STORAGE POND
21	TREATMENT BUILDING
22	INFLUENT SCREENING
23	SOLIDS DEWATERING
24	FUTURE EQUALIZATION BASIN AND PUMP STATION
25	INFLUENT PUMP STATION
26	INFLUENT METER VAULT
27	FUTURE OXIDATION DITCH
28	FUTURE GRIT REMOVAL & SCREENING

MW#3

MW#2



HPUD WRF OVERALL SITE PLAN

ATTACHMENT C

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.

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

**MONITORING AND REPORTING PROGRAM NO. R6T-2016-0036
WDID NO. 6A180208004**

FOR

**HERLONG PUBLIC UTILITY DISTRICT
WASTEWATER TREATMENT AND DISPOSAL FACILITY**

Lassen County

I. GENERAL REQUIREMENTS

A. Effective Date

This monitoring and reporting program (MRP) is being required pursuant to California Water Code section 13267 and is effective on the date as specified by the Water Board's Executive Officer.

B. Overview of Reports Required

The Discharger must provide four quarterly reports and one annual report. The monitoring period covered for each report and the dates the reports are due are provided respectively in section II and section III, below. Each report must provide information on Facility monitoring, groundwater monitoring, sludge disposal, and other required information as specified herein.

C. Certified Cover Letter

The Discharger must use 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.

D. Paperless Submission of Reports and Written Communications

The Discharger must provide all written communication and monitoring reports via e-mail at the following address: lahontan@waterboards.ca.gov. If the report or material is in excess of 50 MB, that information must be provided on a disk (CD or DVD). The reports or materials should be in a Portable Document Format (PDF) package format.

E. Groundwater Data to be Uploaded to Geotracker Database

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

F. General Provisions

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

G. Sampling and Analysis Plan

By **December 30, 2016**, the Discharger must provide to the Water Board a Sampling and Analysis Plan (SAP) pursuant to provision No. 1.d, of the General Provisions for Monitoring and Reporting. Also, a copy of the SAP must be maintained at the Facility and available for inspection. The SAP must include detailed descriptions, procedures and techniques for:

1. Sample collection, sample locations, sampling equipment, and decontamination of sampling equipment;
2. 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 revisions;
3. Sample preservation and shipment;
4. Analytical methods and procedures to be used;
5. Chain of custody and control of samples;
6. Quality assurance/quality control (QA/QC) for sample collection;
7. Calibrating any onsite equipment (e.g., pH meter, electrical conductivity meter), including frequency of calibration; and
8. Making any onsite measurements.

II. MONITORING AND REPORTING REQUIREMENTS

The Discharger must provide four quarterly monitoring reports per year on the following re-occurring dates, covering the time periods stated below. The information that must be provided to complete the report is specified in items A - E, below.

<u>Reporting Period</u>	<u>Monitoring Period</u>	<u>Due Date</u>
1 st Quarter	January 1- March 31	May 1
2 nd Quarter	April 1 - June 30	August 1
3 rd Quarter	July 1 - September 30	November 1
4 th Quarter	October 1 - December 31	February 1

A. General Facility Monitoring Information

The following inspection and other activity must be documented by the Discharger on a monthly basis, and the information must be reported in each quarterly report.

1. Monthly visual inspection of the Facility for spills or leaks at the treatment system area and the disposal area.
2. Any maintenance, repairs, or operational problems that occur during the quarterly reporting period.
3. A description of any corrective action(s) taken to address the maintenance, repairs or operational problem(s) during the quarter, when the actions were taken, and a schedule for completing any incomplete corrective actions identified.

B. Flow Monitoring

The Discharger must monitor and report the total influent flow to the wastewater treatment and disposal system per month (in gallons).

C. Effluent Monitoring

The Discharger must monitor the quality of the effluent discharged to the authorized disposal site. The Discharger must monitor for the following parameters in the discharge at the specified frequency.

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>	<u>Analysis</u>
pH ¹	ph units	Monthly	Field ¹
Specific Conductance/ Electrical Conductivity	µS/cm or µmho /cm ²	Monthly	Field ¹
Total Nitrogen ³	mg/L	Monthly ⁴	Laboratory ²
Biochemical Oxygen Demand	mg/L	Quarterly	Laboratory ²
Total Suspended Solids	mg/L	Quarterly	Laboratory ²
Total Dissolved Solids	mg/L	Quarterly	Laboratory ²
Chloride	mg/L	Quarterly	Laboratory ²

1. For pH and electrical conductivity, these two analyses may be accomplished by field measurement with hand held equipment, provide the Discharger is following manufacturer's recommendations on use and calibration of the equipment.
2. Laboratory – means the analysis must be conducted by a California-certified laboratory.
3. Total Nitrogen must include nitrate-nitrite and total Kjeldahl nitrogen.
4. Total Nitrogen sampling frequency may change to one sample per quarter after 12 consecutive months of values of less than 10 mg/L.

The Discharger must review the effluent data from the data collected in the quarter with respect to effluent limits in Board Order No. R6T-2016-PROP, and self-report any violations in the cover letter (Attachment 1 or equivalent) submitted with each quarterly monitoring report.

D. Groundwater Monitoring

The Discharger has three monitoring wells, labeled MW#1, MW#2, and MW#3, that are used for monitoring the groundwater around the Facility. The following are the required procedures for groundwater sampling, and the information that must be collected and provided in the quarterly monitoring reports.

1. Groundwater Elevation

The depth to groundwater and the groundwater elevation with respect to mean sea level must be determined for each monitoring well prior to well purging during each quarterly sampling event.

2. Groundwater Direction and Gradient

A scaled map of the Facility showing, at a minimum, the Facility's infiltration basins, groundwater monitoring wells, and the groundwater gradient and groundwater flow direction based on the quarterly sampling results.

3. 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 ± 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 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 must 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, depth to groundwater, and total volume purged prior to sampling must also be reported with the groundwater monitoring results.

4. Groundwater Sampling

All groundwater monitoring wells must be monitored quarterly for the constituents listed below.

<u>Parameter</u>	<u>Units</u>	<u>Analysis by</u>
Temperature	C or F	Field procedures ¹
Specific Conductance/ Electrical Conductivity	$\mu\text{S/cm}$ or $\mu\text{mho/cm}^2$	Field procedures ¹
pH	pH units	Field procedures ¹
Total Dissolved Solids	mg/L	Laboratory ²
Nitrate as Nitrogen	mg/L	Laboratory ²
Total Kjeldahl Nitrogen	mg/L	Laboratory ²
Chloride	mg/L	Laboratory ²
Total Coliform	MPN/100mL	Laboratory ²

1. Field procedures – means the analysis will be conducted by field staff in the field with handheld meters that are used in accordance with and calibrated to manufacturer's specifications.

2. Laboratory – means the analysis will be conducted by a California-certified laboratory.

E. Sludge Removal

The Discharger must report the date and quantity of sludge removed from the Facility. The name of the company removing and transporting the material, in addition to the name and location of the facility receiving the material, must also be reported. If no sludge is removed, a statement to that effect must be reported.

III. ANNUAL REPORTING REQUIREMENTS

The Discharger must provide an annual report by **February 15** of each year covering the period from January 1 through December 31, of the previous calendar year. The first annual report is due **February 15, 2017**. The information that must be submitted to complete the report is specified below in items A. - C.

A. Annual Report General Reporting

The Annual Report must include information specified below.

1. Graphical and tabular presentation of all effluent monitoring data obtained for the previous year.
2. Graphical and tabular presentation of all groundwater monitoring data obtained for history of the Facility (for the constituents described in MRP section II.D.4.).
3. The compliance record and any corrective actions taken or planned to be taken to return the Discharger to full compliance with the waste discharge requirements.

B. Groundwater Data Analysis and Review

1. By **October 15, 2016**, the Discharger must produce for acceptance by the Water Board Executive Officer a procedure to analyze and review the groundwater data annually. The review and analysis may be accomplished by comparing up gradient and down gradient monitoring well data, intrawell statistical analysis, interwell statistical analysis, or other methods. The analysis procedure must provide a method to determine if the groundwater data indicates an increasing trend in the constituents that may affect groundwater quality.

If the Executive Officer does not provide a written confirmation in 45 days after receiving the procedure, the procedure may be used for the next annual report and may be considered accepted. Any comments issued after 45 days will require a response and may alter the analyses for the next annual report.

2. The Discharger must annually review all the groundwater data collected pursuant to section III.B.1., above, conduct an analysis as proposed and accepted for the data, and determine if there is any increase over time of constituents that may be associated with the Facility's discharge.
3. The Discharger must 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 in writing in the Annual Report and provide a report identifying the increasing constituent(s).

Ordered By



PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Date June 9, 2016

Attachment 1: Monitoring Report Cover Sheet

Attachment 2: General Provisions for Monitoring and Reporting Program

ATTACHMENT 1

Date _____

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Facility Name:

Address:

Contact Person:

Job Title:

Phone:

Email:

WDR/NPDES Order Number:

WDID Number:

Type of Report (circle one):

Monthly Quarterly Semi-Annual Annual Other

Month(s) (circle applicable month(s)*:

JAN FEB MAR APR MAY JUN
JUL AUG SEP OCT NOV DEC

*annual Reports (circle the first month of the reporting period)

Year:

Violation(s)? (Please check one): _____ NO

_____ YES*

*If YES is marked complete a-g (Attach Additional information as necessary)

a) Brief Description of Violation:

b) Section(s) of WDRs/NPDES

Permit Violated:

c) Reported Value(s) or Volume:

d) WDRs/NPDES

Limit/Condition:

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

f) Explanation of Cause(s):

g) Corrective Action(s)

(Specify actions taken and a schedule for actions to be taken)

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.