
Central Valley Regional Water Quality Control Board

14 June 2018

Jesse Hampton
Calaveras County Water District
P.O. Box 846
San Andreas, CA 95249

CERTIFIED MAIL
91 7199 9991 7036 7006 7464

NOTICE OF APPLICABILITY

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS
ORDER WQ 2014-0153-DWQ**

FOR

**CALAVERAS COUNTY WATER DISTRICT
WALLACE LAKE ESTATES WASTEWATER TREATMENT FACILITY
CALAVERAS COUNTY**

The Calaveras County Water District (CCWD, Discharger) submitted a Report of Waste Discharge dated 28 September 2017 describing Wallace Lake Estates Wastewater Treatment Facility (WWTF) in Calaveras County. Based on the provided information, the proposed domestic wastewater treatment system and discharge is consistent with the requirements of the State Water Resources Control Board (State Water Board) *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems*, Order WQ 2014-0153-DWQ (General Order). This Notice of Applicability (NOA) provides notice that the General Order is applicable to the site as described below. You are hereby assigned Order WQ 2014-0153-DWQ-R5275 for the discharge. A copy of the General Order is enclosed and also available at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

You should familiarize yourself with the entire General Order and its attachments, which describe mandatory discharge and monitoring requirements. The General Order contains operational and reporting requirements by wastewater system type. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached Monitoring and Reporting Program (MRP) WQ 2014-0153-DWQ-R5275. The Discharger is responsible for all the applicable requirements that exist in the General Order and this NOA.

REGULATORY BACKGROUND

WDRs R5-2003-0101, adopted by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) on 6 June 2003, prescribes requirements for the WWTF, and allows a monthly average dry weather inflow (ADWF) of 45,000 gallons per day (gpd). WDRs Order R5-2003-0101 will be rescinded at an upcoming Central Valley Water Board meeting. Effective upon rescission of

Order R5-2003-0101, the discharge described in this NOA shall be regulated pursuant to the General Order.

EXISTING FACILITY AND DISCHARGE DESCRIPTION

The WWTF is located at 100 South Wallace Lake Drive, Wallace, Calaveras County in Sections 15, T4N, R9E, MDB&M as shown on Attachment A, which is incorporated herein. The Assessor's Parcel Numbers for the WWTF are 048-061-015 (treatment facility) and 048-061-013 (storage and disposal pond).

The service area in Wallace is composed of approximately 380 acres of residential housing with initial construction starting in the 1990s. Currently, the WWTF services 116 equivalent single family units comprised of 109 residential homes, and seven businesses located west of the treatment facility along State High Way 12. There are no industrial users. Drinking water is supplied by two groundwater wells with a TDS concentration of 165 mg/L based on the CCWD's 2016 *Annual Water Quality Report*.

The current monthly influent flow averages from approximately 9,100 to 14,400 gpd, which is much less than the flow limit of 45,000 gpd. The Discharger requested to reduce the flow limit from 45,000 to 20,000 gpd. A summary of the monthly influent flows is presented below.

| Average Monthly Influent Flowrate (gpd) | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|
| Month | 2013 | 2014 | 2015 | 2016 | 2017 |
| January | 11,534 | 9,849 | 10,336 | 10,779 | 14,358 |
| February | 10,854 | 10,109 | 11,168 | 10,152 | 13,602 |
| March | 10,587 | 10,450 | 10,976 | 11,714 | 11,129 |
| April | 10,429 | 10,712 | 10,394 | 10,134 | 12,909 |
| May | 11,127 | 11,451 | 9,903 | 10,569 | 13,047 |
| June | 11,597 | 12,807 | 10,498 | 11,721 | 13,357 |
| July | 12,713 | 12,168 | 10,587 | 12,311 | 13,559 |
| August | 12,743 | 11,124 | 10,632 | 12,161 | 12,436 |
| September | 12,556 | 10,830 | 10,267 | 12,581 | 11,236 |
| October | 11,495 | 10,110 | 9,307 | 11,265 | 10,655 |
| November | 11,605 | 9,829 | 9,069 | 11,230 | 10,401 |
| December | 10,894 | 13,390 | 9,815 | 11,136 | 9,435 |
| Annual Average | 11,500 | 11,100 | 10,200 | 11,300 | 12,200 |

The WWTF receives wastewater from the local community's septic tank effluent system. The wastewater treatment processes include flow equalization, three stages of trickling filtration each followed by clarification, and disinfection. The 16,500-gallon flow equalization tank minimizes the flow variations during peak conditions. Crossflow plastic trickling filter media provide a substrate for microorganisms that remove organic material from the wastewater that is sprayed on the filters. Sodium hypochlorite is added to disinfect the effluent prior to discharge to the effluent storage pond. However, the discharger has requested to remove disinfection in order to reduce disinfection by-products and effluent salinity. Therefore, the effluent will not be disinfected after this NOA is

issued. The unlined storage pond is fenced and has a capacity of 40 acre-feet based on two feet of freeboard. The pond percolation rate is estimated to exceed 16 inches per day, which exceeds daily effluent and precipitation volume. Therefore, the storage pond operates as both a storage and percolation pond. The site plan and the process schematic are shown on Attachment B and C, respectively, which are incorporated herein. A summary of the influent and effluent quality is presented below.

| Year | Influent Annual Average (mg/L) | Effluent Annual Average (mg/L) | | | | | |
|-------------------|--------------------------------|--------------------------------|-----|--------|----------|---------------------|-----|
| | BOD ₅ | BOD ₅ | TDS | Sodium | Chloride | Nitrate as Nitrogen | TKN |
| 2013 | 57 | 7.9 | 484 | 74 | 90 | 11 | 18 |
| 2014 | 59 | 7.3 | 449 | 79 | 81 | 17 | 24 |
| 2015 | 59 | 8.4 | 478 | 68 | 77 | 12 | 23 |
| 2016 | 70 | 7.0 | 474 | 98 | 103 | 16 | 22 |
| 2017 | 95 | 9.8 | 451 | 79 | 78 | 6.8 | 32 |
| Five Year Average | 68 | 8.1 | 467 | 80 | 86 | 13 | 24 |

BOD denotes Biochemical Oxygen Demand. TDS denotes Total Dissolved Solids.

TKN denotes Total Kjeldahl Nitrogen.

Biosolids generated from the wastewater treatment process are collected in the bottom of the three secondary clarifiers and conveyed to a sludge holding tank prior to being hauled to the La Contenta WWTF.

Three groundwater monitoring wells MW-1, MW-2 and MW-3 were installed in June 2004 near the storage pond as shown on Attachment B. However, no water has been detected in MW-1 since May 2005. The Discharger plans to replace MW-1 with a new monitoring well MW-1A, which will be installed north of the storage pond and at least 1,000 feet west of the location of MW-1. The Discharger will submit a *Groundwater Monitoring Well Installation Workplan* by **31 December 2018**.

According to the last simultaneous data collected from all three wells prior to May 2005, and on the measurements collected for MW-2 and MW-3 in November 2017, the potentiometric surface was interpreted and may slope sub-parallel to topography to the east at approximately 0.06 feet per foot. The depths to groundwater ranged from approximately 60 to 95 feet below ground surface. A summary of historical groundwater monitoring data is presented in the table below based on quarterly data collected from December 2004 through November 2017.

| Groundwater Quality | | | |
|-------------------------|------|------|---|
| Constituent | MW-2 | MW-3 | Concentration Protective of Beneficial Uses |
| EC (µmhos/cm) | 388 | 222 | 700 ¹ to 2,200 ² |
| TDS (mg/L) | 255 | 216 | 450 ¹ to 1,500 ² |
| Nitrate Nitrogen (mg/L) | 4.0 | 0.3 | 10 ³ |

¹ Lowest agricultural water quality goal.

² Short-term Secondary Maximum Contaminant Level.

³ Primary Maximum Contaminant Level.

SITE-SPECIFIC REQUIREMENTS AND EFFLUENT LIMITS

Note that the General Order contains prohibitions and specifications that apply to all wastewater treatment systems as well as those that only apply to specific treatment and/or disposal systems. The specific requirements and effluent limits for your treatment system are summarized below.

The wastewater treatment operator must be certified and familiar with the requirements contained in the General Order, this NOA, and the MRP.

Requirements by Wastewater System Type, Section B of General Order

B.1 All Wastewater Systems

This applies in its entirety to the WWTF with the following site specific requirements.

B.1.a. Flow Limit.

Treated wastewater discharged to the effluent storage pond shall not exceed **20,000 gpd** as an average dry weather flow defined as the total flow for the months of July through September divided by 92 days.

B.1.I. Wastewater System Setbacks.

| Equipment or Activity | Domestic Well | Flowing Stream | Ephemeral Stream Drainage | Property Line | Lake or Reservoir |
|--|---------------|----------------|---------------------------|---------------|-------------------|
| Aerobic Treatment Unit, Treatment System or Collection System ¹ | 150 ft. | 50 ft. | 50 ft. | 5 ft. | 200 ft. |
| Storage Pond ¹ | 150 ft. | 150 ft. | 150 ft. | 50 ft. | 200 ft. |

¹ Reference setbacks in Table 3 of General Order.

B.5 Pond Systems

The WWTF contains a storage and disposal pond; therefore, this section applies in its entirety.

Requirements of Section D of General Order

D. Effluent Limitations

| Constituent | Units | Limit |
|------------------|-------|----------------------|
| BOD ₅ | mg/L | 20 (monthly average) |

The above limitations apply to the treated wastewater prior to discharge to the storage pond.

PROVISIONS

1. TECHNICAL REPORT PREPARATION REQUIREMENTS

- a. By **31 December 2018**, the Discharger shall submit a *Groundwater Monitoring Well Installation Workplan* that describes a plan to replace MW-1 with a new monitoring well MW-1A. The workplan shall be prepared in accordance with, and include the items listed in, the first section of Attachment D: "*Requirements for Monitoring Well Installation Workplans and Monitoring Well Installation Reports*", which is incorporated herein. The groundwater monitoring well shall be designed to yield samples representative of the uppermost portion of the first aquifer.

MONITORING AND REPORTING PROGRAM

The Discharger shall comply with MRP WQ 2014-0153-DWQ-R5275, which is incorporated herein.

ENFORCEMENT

Please review this NOA carefully to ensure that it completely and accurately reflects the discharge. Discharge of wastes other than those described in this NOA is prohibited. Prior to allowing changes to the wastewater strength or generation rate, or to the method of waste disposal, you must contact the Central Valley Water Board to determine if submittal of an RWD is required.

The Discharger generates the waste subject to the terms and conditions of WQ 2014-0153-DWQ-R5275 and maintains exclusive control over the discharge. As such, CCWD is primarily responsible for compliance with this NOA, MRP, and General Order, with all attachments. Failure to comply with the requirements in the General Order or this NOA could result in an enforcement action as authorized by provisions of the California Water Code.

ANNUAL FEES

Staff has determined the discharge is a threat to water quality and complexity rating of 3-B. The annual fee corresponding to a threat to water quality and complexity of 3-B is currently \$4,699; however, because the permitted flow is less than 50,000 gpd, the discharge qualifies for the 50-percent fee discount. Therefore, the annual fee for this discharge is currently \$2,349. The fee is due and payable on an annual basis until coverage under the General Order is formally rescinded. Please note that the annual fees are reviewed each year and may change. If the wastewater discharge ceases, you must provide written notice so that we can terminate coverage under the General Order and no longer bill you.

DOCUMENT SUBMITTAL

All monitoring reports and other correspondence should be converted to searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50 MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov.

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or any documentation submitted to the mailing address for this office:

| | | |
|---|-------------------------------|------------------------|
| Facility Name: Wallace Lake Estates Wastewater Treatment Facility, Calaveras County | | |
| Program: Non-15 Compliance | Order: WQ 2014-0153-DWQ-R5275 | CIWQS Place ID: 271617 |

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Now that the Notice of Applicability has been issued, the Board's Compliance and Enforcement section will take over management of your case. Kenny Croyle is your new point of contact for any questions about the General Order. If you find it necessary to make a change to your permitted operations, Kenny will direct you to the appropriate Permitting staff. You may contact Kenny at (916) 464-4676 or at kcroyle@waterboards.ca.gov.

Original signed by Andrew Altevogt for

Patrick Pulupa
Executive Officer

enc: Water Quality Order WQ 2014-0153-DWQ
 Monitoring and Reporting Program WQ 2014-0153-DWQ-R5275
 Attachment A, Site Location Map
 Attachment B, Site Plan
 Attachment C, Process Schematic
 Attachment D, Requirements for Monitoring Well Installation Workplans and
 Monitoring Well Installation Reports
 Monitoring Report Transmittal Sheet

cc w/out enc: Timothy O'Brien, State Water Resources Control Board, Sacramento
 Brian Moss, Calaveras County Environmental Health Department, San Andreas

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
MONITORING AND REPORTING PROGRAM WQ 2014-0153-DWQ-R5275
FOR
CALAVERAS COUNTY WATER DISTRICT
WALLACE LAKE ESTATES WASTEWATER TREATMENT FACILITY
CALAVERAS COUNTY

This Monitoring and Reporting Program (MRP) presents requirements for monitoring of the wastewater influent, effluent, storage reservoir, groundwater, sludge, and water supply monitoring. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All wastewater samples should be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Wastewater flow monitoring shall be conducted continuously using a flow meter and shall be reported in cumulative gallons per day.

Field test instruments (such as pH and dissolved oxygen) may be used if:

1. The operator is trained in the proper use of the instrument;
2. The instruments are field calibrated prior to each use;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

Analytical procedures shall comply with the methods and holding times specified in the following: Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA); Test Methods for Evaluating Solid Waste (EPA); Methods for Chemical Analysis of Water and Wastes (EPA); Methods for Determination of Inorganic Substances in Environmental Samples (EPA); Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and Soil, Plant and Water Reference Methods for the Western Region (WREP 125). Approved editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health's Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

INFLUENT MONITORING

Influent flow monitoring shall be performed at the headworks. Samples shall be collected at approximately the same time as effluent samples and should be representative of the influent. Influent monitoring shall include the following:

| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Sampling Frequency</u> | <u>Reporting Frequency</u> |
|-------------------------------|--------------|-----------------------|---------------------------|----------------------------|
| BOD ₅ ¹ | mg/L | Grab | Monthly | Monthly |

¹ 5-day biochemical oxygen demand.

EFFLUENT MONITORING

Samples of effluent shall be collected from the pump station downstream of the wastewater treatment plant. At a minimum, effluent monitoring shall consist of the following:

| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Sampling Frequency</u> | <u>Reporting Frequency</u> |
|--------------------------------|----------------|-----------------------|---------------------------|----------------------------|
| Flow ¹ | gpd | Continuous | Daily | Monthly |
| BOD ₅ | mg/L | Grab | Weekly | Monthly |
| pH | Standard Units | Grab | Weekly | Monthly |
| Total Dissolved Solids | mg/L | Grab | Monthly | Monthly |
| Nitrate as Nitrogen | mg/L | Grab | Monthly | Monthly |
| Total Kjeldahl Nitrogen | mg/L | Grab | Monthly | Monthly |
| Standard Minerals ² | mg/L | Grab | Annually | Annually |

¹ Flow may be monitored from the pump station that conveys effluent into the effluent storage pond.

² Standard Minerals shall include, at a minimum, the following elements/compounds: boron, calcium, chloride, magnesium, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness.

EFFLUENT STORAGE POND MONITORING

The effluent storage pond shall be monitored as follows. If the pond is empty on the scheduled monitoring date, the Discharger may report the freeboard monitoring result as “dry”.

| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Sampling Frequency</u> | <u>Reporting Frequency</u> |
|-------------------------------|--------------|-----------------------|---------------------------|----------------------------|
| Dissolved Oxygen ¹ | mg/L | Grab | Weekly | Monthly |
| Freeboard | 0.1 feet | Measurement | Weekly | Monthly |
| Odors | -- | Observation | Weekly | Monthly |
| Levee condition ² | -- | Observation | Weekly | Monthly |

¹ If the pond is too low to take a dissolved oxygen reading, then this shall be noted on the monthly monitoring report.

² Containment levees shall be observed for signs of seepage or surfacing water along the exterior toe of the levees. If surfacing water is found, then a sample shall be collected and tested for total coliform organisms and total dissolved solids.

GROUNDWATER MONITORING

Prior to construction and/or sampling of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new wells shall be added to the MRP and shall be sampled and analyzed according to the schedule below.

Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged at least three well volumes until temperature, pH and electrical conductivity have stabilized. Low or no-purge sampling methods are acceptable upon approval by the Central Valley Water Board. Depth to groundwater shall be measured to the nearest 0.01 feet. Samples shall be collected using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

| <u>Constituent</u> | <u>Units</u> | <u>Type of Sample</u> | <u>Reporting Frequency</u> |
|------------------------------------|--------------|-----------------------|----------------------------|
| Depth to Groundwater | 0.01 feet | Measurement | Semi-annually |
| Groundwater Elevation ¹ | 0.01 feet | Calculated | Semi-annually |
| Gradient | feet/feet | Calculated | Semi-annually |
| Gradient Direction | degrees | Calculated | Semi-annually |
| Total Dissolved Solids | mg/L | Grab | Semi-annually |
| Electrical Conductivity | µmhos/cm | Grab | Semi-annually |
| Nitrate as Nitrogen | mg/L | Grab | Semi-annually |
| Total Kjeldahl Nitrogen | mg/L | Grab | Semi-annually |
| pH | pH units | Grab | Semi-annually |
| Standard Minerals ^{2,3} | mg/L | Grab | Annually |

¹ Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.

² Standard Minerals shall include, at a minimum, the following elements/compounds: boron, calcium, chloride, dissolved iron, dissolved manganese, magnesium, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness.

³ Samples shall be filtered prior to preservation using a 0.45µm or less filter.

SOLID WASTE AND SLUDGE MONITORING

A grab sample of digested sludge shall be collected at least once per year when sludge is removed from the wastewater treatment system for disposal in accordance with EPA's POTW Sludge Sampling and Analysis Guidance Document, August 1989, and analyzed for cadmium, copper, nickel, chromium, lead, and zinc. Sampling records shall be retained for a minimum of five years.

A log shall be kept if solid waste (grits and screenings) and sludge quantities generated and of handling and disposal activities, and shall be submitted as part of the monthly monitoring reports.

WATER SUPPLY MONITORING

A sampling station shall be established where a representative sample of the municipal water supply can be obtained. Water supply monitoring shall include at least the following for each water source used during the previous year:

| <u>Constituents</u> | <u>Units</u> | <u>Sampling Frequency</u> ² | <u>Reporting Frequency</u> |
|--------------------------------|--------------|--|----------------------------|
| Total Dissolved Solids | mg/L | Annually | Annually |
| pH | pH units | Annually | Annually |
| Standard Minerals ¹ | mg/L | Annually | Annually |

¹ Standard Minerals shall include, at a minimum, the following elements/compounds: barium, calcium, magnesium, sodium, potassium, chloride, nitrogen, sulfate, total alkalinity (including alkalinity series), and hardness.

² As an alternative to annual water supply monitoring, the Discharger may submit results of the most current DHS water supply monitoring data.

REPORTING

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to:

centralvalleysacramento@waterboards.ca.gov

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board

ECM Mailroom

11020 Sun Center Drive, Suite 200

Rancho Cordova, California 95670

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

| | | |
|---|-------------------------------|------------------------|
| Facility Name: Wallace Lake Estates Wastewater Treatment Facility, Calaveras County | | |
| Program: Non-15 Compliance | Order: WQ 2014-0153-DWQ-R5275 | CIWQS Place ID: 271617 |

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next scheduled monitoring report.

In addition to the requirements of Standard Provision C.3, monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a California Registered Engineer or Geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board by the **1st day of the second month** following the end of the reporting period (i.e. the January monthly report is due by 1 March).

At a minimum, the reports shall include:

1. Results of the influent, effluent, pond, solid wastes and sludge monitoring;
2. A comparison of the monitoring data to the discharge specifications and an explanation of any violation of those requirements;
3. If requested by staff, copies of laboratory analytical report(s); and
4. Date(s) on which the monitoring instruments were calibrated.

B. Semi-Annual Monitoring Reports

In addition to the monthly monitoring reports, the Discharger shall establish a semi-annual sampling schedule for groundwater monitoring such that samples are obtained approximately every six months. Semi-Annual Monitoring Reports shall be submitted to the Central Valley Water Board by the **1st day of February and August**. The Semi-Annual Monitoring Reports shall include the following:

1. Results of groundwater monitoring;
2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged;
3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
6. Summary data tables of historical and current water table elevations and analytical results;
7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum;
8. Results of quarterly effluent monitoring; and
9. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

In addition to the monthly and semi-annual monitoring reports, an Annual Report shall be prepared. The Annual Report shall be submitted to the Central Valley Water Board by **1 February** each year. The Annual Report shall include the following:

1. The results from annual monitoring of the effluent, groundwater, and water supply;
2. If requested by staff, tabular and graphical summaries of all data collected during the year;
3. An evaluation of the groundwater quality beneath the wastewater treatment facility and reclamation area;

4. A discussion of compliance and the corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements;
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program;
6. A copy of the certification for each certified wastewater treatment plant operator working at the facility and a statement about whether the Discharger is in compliance with Title 23, CCR, Division 3, Chapter 26.
7. The results from any sludge monitoring required by the disposal facility; and
8. A forecast of influent flows, as described in Standard Provision No. E.4.

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

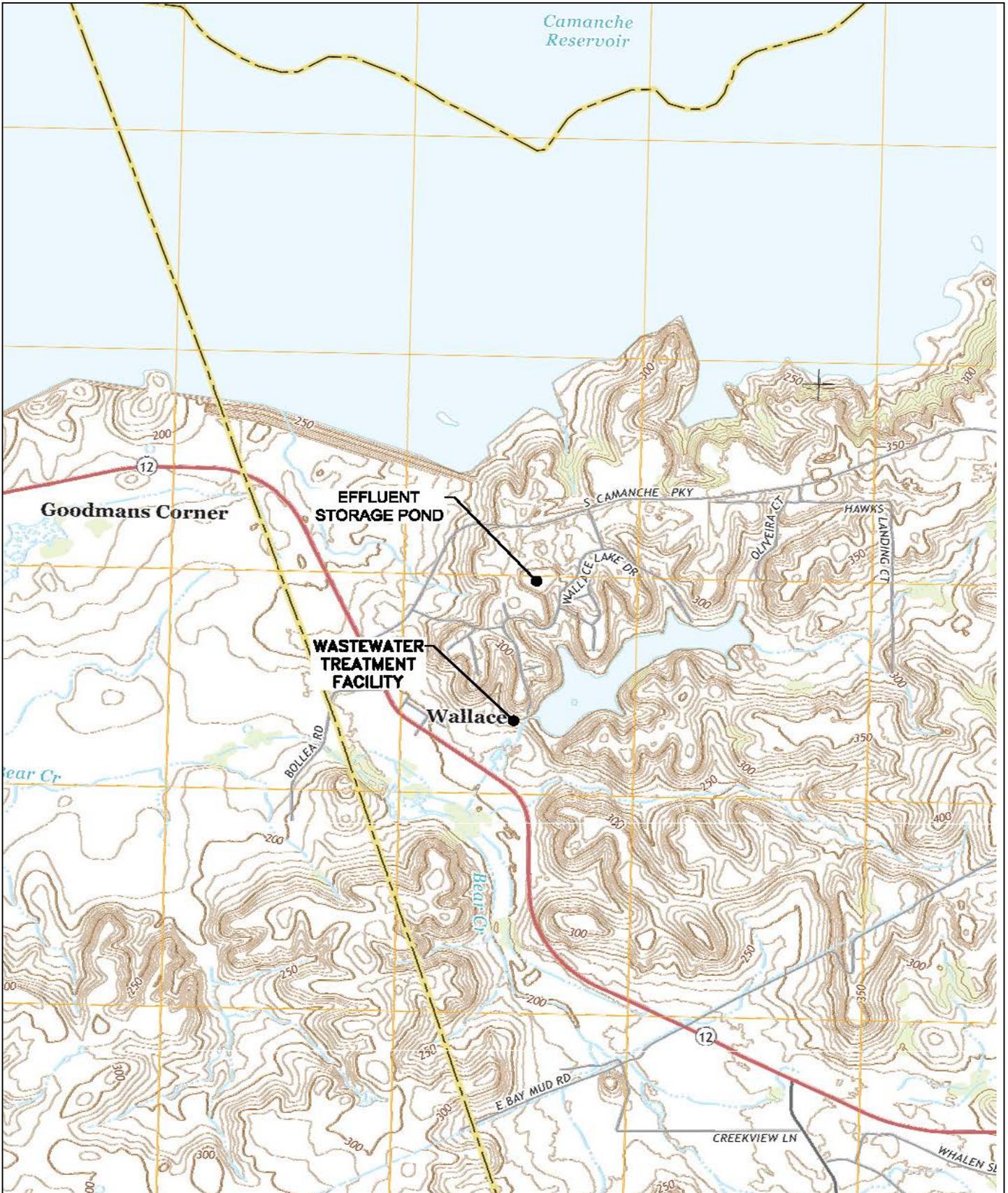
The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by: *Original signed by Andrew Altevogt for*

Patrick Pulupa, Executive Officer

14 June 2018

(Date)



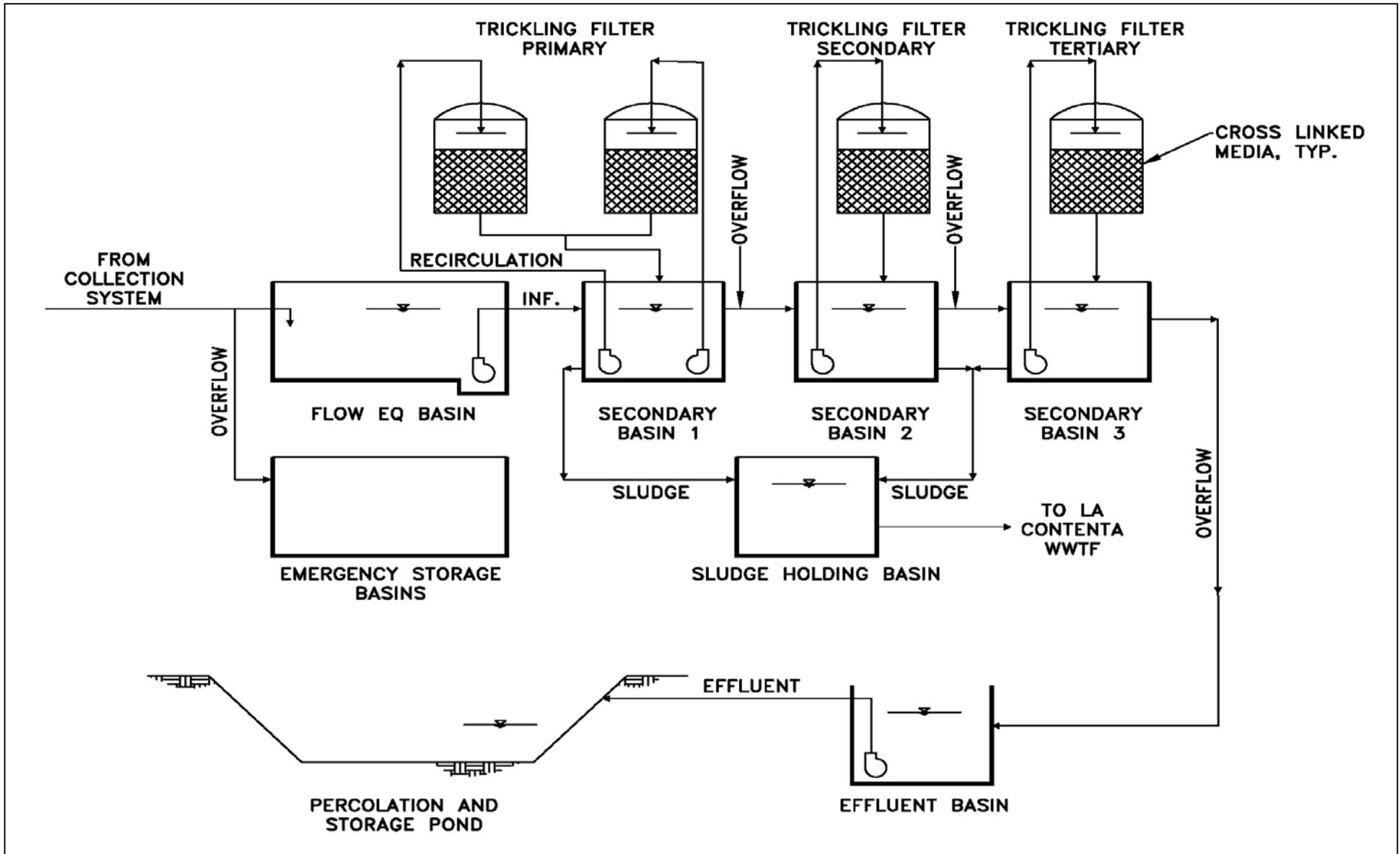
Drawing Reference:
Calaveras County Water District
RWD, September 2017

SITE LOCATION MAP
CALAVERAS COUNTY WATER DISTRICT
WALLACE LAKE ESTATES WASTEWATER TREATMENT FACILITY



Drawing Reference:
Calaveras County Water District
RWD, September 2017

SITE MAP
CALAVERAS COUNTY WATER DISTRICT
WALLACE LAKE ESTATES WASTEWATER TREATMENT



Drawing Reference:
 Calaveras County Water District
 RWD, September 2017

PROCESS SCHEMATIC
 CALAVERAS COUNTY WATER DISTRICT
 WALLACE LAKE ESTATES WASTEWATER TREATMENT PLANT

ORDER WQ 2014-0153-DWQ-R5275

ATTACHMENT D

REQUIREMENTS FOR MONITORING WELL INSTALLATION WORKPLANS AND MONITORING WELL INSTALLATION REPORTS

Prior to installation of groundwater monitoring wells, the Discharger shall submit a workplan containing, at a minimum, the information listed in Section 1, below. Wells may be installed after staff approve the workplan. Upon installation of the monitoring wells, the Discharger shall submit a well installation report which includes the information contained in Section 2, below.

All workplans and reports must be prepared under the direction of, and signed by, a registered geologist or civil engineer licensed by the State of California.

SECTION 1 - Monitoring Well Installation Workplan and Groundwater Sampling and Analysis Plan

The monitoring well installation workplan shall contain the following minimum information:

A. General Information:

- Purpose of the well installation project
- Brief description of site specific geologic and hydrogeologic conditions
- Proposed monitoring well locations and rationale for well locations
- Topographic map showing facility location, roads, and surface water bodies
- Large scaled site map showing all existing on-site wells, proposed wells, surface drainage courses, surface water bodies, buildings, waste handling facilities, utilities, and major physical and man-made features

B. Drilling Details:

- On-site supervision of drilling and well installation activities
- Description of drilling equipment and techniques
- Equipment decontamination procedures
- Soil sampling intervals (if appropriate) and logging methods

C. Monitoring Well Design (in narrative and/or graphic form):

- Diagram of proposed well construction details
 - Borehole diameter
 - Casing and screen material, diameter, and centralizer spacing (if needed)
 - Type of well caps (bottom cap either screw on or secured with stainless steel screws)
 - Anticipated depth of well, length of well casing, and length and position of perforated interval
 - Thickness, position and composition of surface seal, sanitary seal, and sand pack
 - Anticipated screen slot size and filter pack

D. Well Development (not to be performed until at least 48 hours after sanitary seal placement):

- Method of development to be used (i.e., surge, bail, pump, etc.)
- Parameters to be monitored during development and record keeping technique
- Method of determining when development is complete
- Disposal of development water

E. Well Survey (precision of vertical survey data shall be at least 0.01 foot):

Identify the Licensed Land Surveyor or Civil Engineer that will perform the survey

Datum for survey measurements

List well features to be surveyed (i.e. top of casing, horizontal and vertical coordinates, etc.)

F. Schedule for Completion of Work

G. Appendix: Groundwater Sampling and Analysis Plan (SAP)

The Groundwater SAP shall be included as an appendix to the workplan, and shall be utilized as a guidance document that is referred to by individuals responsible for conducting groundwater monitoring and sampling activities.

Provide a detailed written description of standard operating procedures for the following:

- Equipment to be used during sampling
- Equipment decontamination procedures
- Water level measurement procedures
- Well purging (include a discussion of procedures to follow if three casing volumes cannot be purged)
- Monitoring and record keeping during water level measurement and well purging (include copies of record keeping logs to be used)
- Purge water disposal
- Analytical methods and required reporting limits
- Sample containers and preservatives
- Sampling
 - General sampling techniques
 - Record keeping during sampling (include copies of record keeping logs to be used)
 - QA/QC samples
- Chain of Custody
- Sample handling and transport

SECTION 2 - Monitoring Well Installation Report

The monitoring well installation report must provide the information listed below. In addition, the report must also clearly identify, describe, and justify any deviations from the approved workplan.

A. General Information:

Purpose of the well installation project

Brief description of local geologic and hydrogeologic conditions encountered during installation of the wells

Number of monitoring wells installed and copies of County Well Construction Permits

Topographic map showing facility location, roads, surface water bodies

Scaled site map showing all previously existing wells, newly installed wells, surface water bodies, buildings, waste handling facilities, utilities, and other major physical and man-made features.

B. Drilling Details (in narrative and/or graphic form):

On-site supervision of drilling and well installation activities

Drilling contractor and driller's name

Description of drilling equipment and techniques

Equipment decontamination procedures
Soil sampling intervals and logging methods

Well boring log

- Well boring number and date drilled
- Borehole diameter and total depth
- Total depth of open hole (same as total depth drilled if no caving or back-grouting occurs)
- Depth to first encountered groundwater and stabilized groundwater depth
- Detailed description of soils encountered, using the Unified Soil Classification System

C. Well Construction Details (in narrative and/or graphic form):

Well construction diagram, including:

- Monitoring well number and date constructed
- Casing and screen material, diameter, and centralizer spacing (if needed)
- Length of well casing, and length and position of perforated interval
- Thickness, position and composition of surface seal, sanitary seal, and sand pack
- Type of well caps (bottom cap either screw on or secured with stainless steel screws)

E. Well Development:

Date(s) and method of development

How well development completion was determined

Volume of water purged from well and method of development water disposal

Field notes from well development should be included in report

F. Well Survey (survey the top rim of the well casing with the cap removed):

Identify the coordinate system and datum for survey measurements

Describe the measuring points (i.e. ground surface, top of casing, etc.)

Present the well survey report data in a table

Include the Registered Engineer or Licensed Surveyor's report and field notes in appendix