

Central Valley Regional Water Quality Control Board

1 July 2015

WDID: 5A45NC00032

Mr. Marcus Partin
Redding Reserve One, LLC
169 Hartnell Ave, Suite 203
Redding, CA 96002

NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5186, SHASTA WINE VILLAGE, SHASTA COUNTY

On 28 August 2014, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff received an application for a waste discharge permit for Shasta Wine Village (Discharger). The application included a Report of Waste Discharge (ROWD), a completed Form 200, and an application fee. On 3 October 2014 staff deemed the ROWD incomplete due to insufficient dispersal field design details. On 20 November 2014 the Discharger submitted a revised ROWD, and on 4 December 2014, staff deemed the application complete.

Based on the information provided, the facility plans to treat and dispose of less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as a formal notice that the General Order is applicable to your facility and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ - R5186 for your facility.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which prescribes mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements that are applicable to your treatment and disposal methods must be completed in accordance with the sections of the General Order and the attached *Monitoring and Reporting Program* (MRP). This MRP was developed after consideration of your treatment system infrastructure and site conditions described in the attached *Technical Memorandum*.

DISCHARGE DESCRIPTION

Shasta Wine Village is located in Shasta County, east of Interstate Highway I-5, southeast of the intersection of Holiday Road and Old Oregon Trail in Section 21 of Township 33 N, Range 4 W, Mount Diablo Baseline and Meridian. The wastewater treatment system includes a package treatment plant with a series of tanks and aerobic treatment units, ultra-violet light disinfection, and two subsurface drip-line dispersal fields. The average daily waste water flows is less than 1,000 gallons per day (GPD) with a maximum daily flow of 3,300 GPD. The wastewater system is designed to treat a maximum daily flow of 3,300 GPD. The treatment system overlies thin low permeability soils sitting on shallow bedrock with a shallow water table. In efforts to overcome shallow soil and groundwater conditions beneath the site the dispersal fields will be constructed as a mounded dispersal system with engineered fill to provide sufficient separation from shallow groundwater. The site location is shown in Attachment A (Figure 1) of this letter.

The Discharger has completed the California Environmental Quality Act (CEQA) review through Mitigated Negative Declarations (State Clearinghouse Number 2012062083 and 2013082034).

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA and the General Order 2014-0153-DWQ-R5186, with all attachments.

The General Order states in Section B.1.I. that the discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater system equipment, activities, land application areas, and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the following applicable setback requirements as summarized in the following table.

Site Specific Applicable Setback Requirements					
Equipment or Activity	Domestic Well	Flowing Stream	Ephemeral Stream Drainage^a	Property Line	Lake or Reservoir
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System ^b	NA	NA	50 ft. ^c	5 ft.	NA
Leach Field ^d	NA	NA	50 ft. ^c	5 ft.	NA
^a Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snowmelt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limit of the original high water mark (established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means). Irrigation canals are not considered ephemeral streams drainage features. The ephemeral stream shall be a "losing stream" (discharging surface water to groundwater) at the proposed wastewater system site. ^b Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection. ^c Setback established by California Plumbing Code, Table K-1. This distance shall be measured from the top of bank of the ephemeral stream drainage to the closest leach field dispersal pipe and treatment system equipment. ^d Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.					

Additionally, the General Order states in Section D.1.a. that the discharger shall comply with the effluent limitations as described in Table 4. This table summarizes effluent limits for constituents based on treatment technologies and flowrates. The Discharger shall comply with the following applicable effluent limitations as summarized in the following table.

Site Specific Applicable Effluent Limitations			
Constituent	Units	Effluent Limit	
		Monthly Average	7-Day Average
Total Suspended Solids (TSS)	mg/L	30	45
Biochemical Oxygen Demand (BOD)	mg/L	30	45

Failure to comply with the requirements in the documents could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, MRPs, 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: centralvalleyredding@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 364 Knollcrest Drive, Suite 205, Redding, CA 96002. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: WDR, WDID: 5A45NC00032, Facility Name: Shasta Wine Village, Order: 2014-0153-DWQ-R5186

If you have any questions regarding submitting an updated report of waste discharge, making changes to your permitted operations, compliance or enforcement please contact Rebecca Tabor at (530) 226-3458, rebecca.tabor@waterboards.ca.gov, or the footer address.



For PAMELA C. CREEDON
Executive Officer

RLT:sjs

Attachments: Shasta Wine Village Facility Location Map
Technical Memorandum
Monitoring and Reporting Program
General Order No. 2014-0153-DWQ



SITE VICINITY MAP

PROJECT NAME: ROWD	PROJECT 011060.00	DATE: 8/27/14
CLIENT: REDDING RESERVE ONE	DRAWN BY: D. ZAITZ	FIGURE 1
SCALE: 1 in = 1 miles	CHECKED BY: B. LAMPLEY	

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5186

FOR

SHASTA WINE VILLAGE
SHASTA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. 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 Regional Water Quality Control Board (Regional Water Board) Executive Officer.

Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13268 states, in part:

“(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

The Discharger owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Board California Environmental Laboratory Accreditation Program certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

TREATMENT SYSTEM MONITORING

Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater and flow rate. At a minimum, influent monitoring shall consist of the following:

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate ^a	gpd	Meter	Continuous	Quarterly
gpd denotes gallons per day				
^a At a minimum, the total daily flow shall be measured to calculate the total monthly flow and average daily flow.				

Septic (Primary) Tank Monitoring

Septic (Primary) tanks shall be inspected and/or pumped at least as frequently as described below. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

Parameter	Units	Measurement Type	Inspection/Reporting Frequency
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Annually
Distance between bottom of scum layer and top of outlet device	Inches	Staff Gauge	Annually
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually
Effluent filter condition (if equipped, clean as needed)	NA	NA	Annually
NA denotes not applicable.			

Septic tanks shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

If a septic tank is pumped during the year, the pumping report shall be submitted with the annual report. All pumping reports shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

Aerobic Treatment Unit Monitoring

Effluent Monitoring

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the disposal area. At a minimum, effluent monitoring shall consist of the following:

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Metered ^a	Continuous	Quarterly
Biochemical Oxygen Demand	mg/L	Grab	Monthly	Quarterly
Total Suspended Solids	mg/L	Grab	Monthly	Quarterly

gpd denotes gallons per day. mg/L denotes milligrams per liter.
^a Flow rate may be metered or estimated based on potable water supply meter readings or other approved method. Flow rates may be measured as influent or effluent flow.

Aerobic treatment units may be integrated in a treatment train and all components shall be inspected to verify operational status. It is highly recommended that the Discharger obtain a service agreement with a qualified service provider/vendor. Because aerobic treatment units generate more bio-solids than septic systems (similar to the activated sludge process), systems shall be inspected and/or pumped at least as frequently as described below.

Parameter	Units	Measurement Type	Inspection/Reporting Frequency
Sludge depth and scum thickness in each compartment of each tank	Feet	Staff Gauge	Quarterly
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Quarterly
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Quarterly
Effluent filter condition (if equipped, clean as needed)	NA	NA	Quarterly

NA denotes not applicable.

Aerobic treatment units shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the final settling tank or interferes with the operation of the system (mixed liquor aerator solids shall not exceed the manufacturer's recommendation).
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

All pumping reports shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

Disinfection System Monitoring

Samples shall be collected from immediately downstream of the disinfection system. Depending upon the level of disinfection and wastewater disposal, monitoring requirements vary. Disinfection monitoring shall be customized to the site-specific conditions from the following:

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Total Coliform Organisms	MPN/100 mL	Grab	Monthly	Quarterly
Turbidity	NTU	Grab/Meter	Monthly	Quarterly

MPN/100 mL denotes most probable number per 100 mL sample. NTU denotes nephelometric turbidity unit.

SUBSURFACE DISPOSAL AREA

Subsurface disposal area consists of a mounded dispersal system with subsurface drip emitters with engineered fill. In general, monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area. Monitoring shall include, at a minimum, the following:

Constituent	Units	Sample Type	Sample Frequency	Reporting Frequency
Flow Rate ^a	gpd	Meter	Continuous	Quarterly
Precipitation ^b	in/day	Visual	Daily	Quarterly

gpd denotes gallons per day; in/day denotes inch per day.

^a At a minimum, the total daily flow to each subsurface disposal area shall be measured. This shall be used to calculate the total monthly flow and average daily flow applied to each disposal field.

^b The Discharger shall inspect each subsurface disposal area, diversion, and drainage facilities for damage, erosion, slope failure, and ground saturation **within 3 days** following *major storm events*. Major storm events are defined as 1.5 inches of precipitation within a 24-hour period. Necessary repairs shall be completed **within 30 days** of the inspection. The Discharger shall report any damage within 7 days, and subsequent repairs within 45 days of completion of the repairs, including photographs of the problem and the repairs.

Constituent	Inspection Frequency	Reporting
Pump Controllers, Automatic Valves, etc. ^a	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions ^b	Quarterly	Quarterly
Plant Growth ^c	Quarterly	Quarterly
Vectors or Animal Burrowing ^d	Quarterly	Quarterly

^a All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.

^b Inspect a disposal area for saturated conditions. If a mound system is used, inspect perimeter base for signs of wastewater seepage or saturated soil conditions.

^c Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.

^d Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, bio-solids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

GROUNDWATER MONITORING

The Discharger shall monitor groundwater quality. Consistent with the Business and Professions Code, groundwater monitoring reports, well construction work plans, etc. shall be prepared under the supervision of a California licensed civil engineer or geologist. Prior to construction of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Water Board's staff for review and approval. Once installed, all monitoring wells designated as part of the monitoring network shall be sampled and analyzed according to the schedule below.

The data from routine groundwater monitoring events shall be submitted quarterly. Analysis of the data and groundwater flow directions shall be performed at least annually and shall be performed under the supervision of a California licensed professional (as described above). The Discharger may request a reduced monitoring and reporting schedule once adequate data has been collected to characterize the site. (Typically two years of quarterly sampling is required for adequate characterization.)

Prior to sampling, groundwater elevations shall be measured and the wells shall be purged of at least three well volumes and until pH and electrical conductivity have stabilized. No-purge, low-flow, or other sampling techniques are acceptable if they are described in an approved Sampling and Analysis Plan. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater elevations shall be calculated. Samples shall be collected using approved USEPA methods. Groundwater monitoring shall include, at a minimum, the following:

Constituent	Units	Sample Type	Sampling/Reporting Frequency ^c
Groundwater Elevation ^a	0.01 Feet	Calculated	Quarterly
Depth to Groundwater	0.01 Feet	Measurement	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly
Gradient Direction	degrees	Calculated	Quarterly
pH	Std. Units	Grab	Quarterly
Eh	mV	Grab	Quarterly
Temperature	Degrees C	Measurement	Quarterly
Specific Conductance	µS/cm	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Turbidity	NTU	Grab	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Total Coliform ^b	MPN/100 mL	Grab	Quarterly
Fecal Coliform ^b	MPN/100 mL	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Phosphate	mg/L	Grab	Quarterly

Constituent	Units	Sample Type	Sampling/Reporting Frequency ^c
Calcium	mg/L	Grab	Quarterly
Magnesium	mg/L	Grab	Quarterly
Potassium	mg/L	Grab	Quarterly
Bicarbonate	mg/L	Grab	Quarterly
Carbonate	mg/L	Grab	Quarterly
Aluminum ^d	µg/L	Grab	Quarterly
Arsenic ^d	µg/L	Grab	Quarterly
Chromium (Total) ^d	µg/L	Grab	Quarterly
Chromium VI ^d	µg/L	Grab	Quarterly
Copper ^d	µg/L	Grab	Quarterly
Iron ^d	µg/L	Grab	Quarterly
Lead ^d	µg/L	Grab	Quarterly
Manganese ^d	µg/L	Grab	Quarterly
Nickel ^d	µg/L	Grab	Quarterly
Zinc ^d	µg/L	Grab	Quarterly
MPN/100 mL denotes most probable number per 100 mL sample; Std. Units denotes standard units; mg/L denotes milligrams per liter; µg/L denotes micrograms per liter; mV denotes millivolts; NTU denotes nephelometric turbidity units; µS/cm denotes microSiemens. ^a Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation. ^b Using a minimum of 15 tubes or three dilutions. ^c Analysis of data by a California licensed professional is required at least annually ^d Total and dissolved concentrations shall be analyzed.			

SURFACE WATER MONITORING

The Discharger shall sample all ephemeral drainages, and any seepage from the subsurface disposal areas. Because of the difficulty in monitoring bacteria in surface water, sample collection procedures must be described in a *Sampling and Analysis Plan*. Natural bacteria levels can vary significantly, and may be correlated with rainfall. When possible, surface water bacteria samples should be collected under dry weather conditions. It is critical when monitoring bacteria that all containers and surfaces a sample contacts are sterile. Sample containers must be autoclaved or manufactured to maintain sterility; use of screw top bottles, Whirl-pak[®] bags, or similar containers is acceptable. The sample hold time for bacteria samples is typically no more than six hours. Monitoring shall include, at a minimum, the following:

Constituent	Units	Sample Type	Sampling/Reporting Frequency ^c
pH	Std. Units	Grab	Quarterly
Eh	mV	Grab	Quarterly
Temperature	Degrees C	Measurement	Quarterly
Specific Conductance	µS/cm	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Turbidity	NTU	Grab	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly

Constituent	Units	Sample Type	Sampling/Reporting Frequency ^c
<i>Escherichia coli</i> (E. coli) ^a	MPN/100 mL	Grab	Quarterly
Enterococci ^b	MPN/100 mL	Grab	Quarterly
Sulfate	mg/L	Grab	Quarterly
Phosphate	mg/L	Grab	Quarterly
Calcium	mg/L	Grab	Quarterly
Magnesium	mg/L	Grab	Quarterly
Potassium	mg/L	Grab	Quarterly
Bicarbonate	mg/L	Grab	Quarterly
Carbonate	mg/L	Grab	Quarterly
Aluminum ^d	µg/L	Grab	Quarterly
Arsenic ^d	µg/L	Grab	Quarterly
Chromium (Total) ^d	µg/L	Grab	Quarterly
Chromium VI ^d	µg/L	Grab	Quarterly
Copper ^d	µg/L	Grab	Quarterly
Iron ^d	µg/L	Grab	Quarterly
Lead ^d	µg/L	Grab	Quarterly
Manganese ^d	µg/L	Grab	Quarterly
Nickel ^d	µg/L	Grab	Quarterly
Zinc ^d	µg/L	Grab	Quarterly

MPN/100 mL denotes most probable number per 100 mL sample; Std. Units denotes standard units; mg/L denotes milligrams per liter; µg/L denotes micrograms per liter; mV denotes millivolts; NTU denotes nephelometric turbidity units; µS/cm denotes microSiemens.

^a Analysis by USEPA Method 1603 or equivalent.
^b Analysis by USEPA Method 1600 or equivalent.
^c Using a minimum of 15 tubes or three dilutions.
^d Analysis of data by a California licensed professional is required at least annually
^d Total and dissolved concentrations shall be analyzed.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to clearly illustrate compliance with the General Order and NOA 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 regularly scheduled monitoring report and shall be included in calculations as appropriate.

During the life of this General Order, the State Water Board or Regional Water Board may require the Discharger to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) program Internet web site or alternative database. Electronic submittal procedures will be provided when directed to begin electronic submittals. Until directed to electronically submit monitoring reports, the Discharger shall submit hard copy monitoring reports.

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

1. Results of all required monitoring.
2. A comparison of monitoring data to the discharge specifications, applicable effluent limits, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format.)
3. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment facility, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year. A flow rate evaluation as described in the General Order (Provision E.2.c) shall also be submitted.
3. If disinfection with ultraviolet light is performed, describe disinfection system maintenance activities performed in the calendar year. The description shall address inspections performed, lamp bulb replacement, lamp sleeve cleaning, and manufacturer recommended maintenance activities
4. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.
7. A groundwater monitoring report prepared by a California licensed professional. This report may be prepared separately from the rest of the Annual Report. The report shall contain an analysis of groundwater data collected during the year. The analysis shall include a description of the sample events, copies of the field logs, purge method and volume, groundwater elevation and trend, a groundwater elevation map for each sample event, summary tables showing results for parameters measured, comparison of groundwater quality parameters to standards in the NOA, chain-of-custody forms, calibration logs for field equipment used, and a general evaluation of any impacts the wastewater discharge is having on groundwater quality.

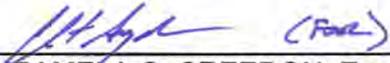
A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is

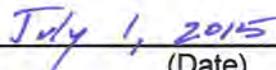
true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program as of the date of this MRP.

Ordered by:

 (For)

PAMELA C. CREEDON, Executive Officer



(Date)

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

TO: Bryan Smith, P.E.
Supervising Water Resources
Control Engineer

FROM: Rebecca Tabor, P.E.
Water Resources Control Engineer

DATE: 1 July 2015

SIGNATURE: 
(for) Rebecca Tabor

**SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR SHASTA WINE VILLAGE,
SHASTA COUNTY GENERAL ORDER WQ 2014-0153-DWQ ENROLLMENT**

Staff has reviewed the 28 August 2014 Report of Waste Discharge (ROWD), the 20 November 2014 Revised ROWD and associated documents and correspondence. The ROWD and revisions describe the general design of the wastewater treatment and subsurface dispersal system.

The project site is on the southeast intersection of Holiday Road and Old Oregon Trail east of Interstate Highway 5. Construction of the project facilities, including the wastewater treatment system and dispersal fields has not yet begun. The Discharger should submit final design plans to our office for concurrence prior to construction to ensure that ephemeral stream drainage and property line setbacks prescribed in the General Order Section B.1.1. are adhered to.

The anticipated average daily wastewater flow less than 1,000 gallons per day (gpd) with a maximum daily flow of 3,300 gpd. The onsite wastewater treatment system is designed to treat a maximum daily flow of 3,300 gpd. Treated wastewater will be dispersed year-round via subsurface drip emitters to two dispersal fields. The eastern dispersal field is approximately 0.68 acres and the western dispersal field is approximately 0.58 acres.

Potential Threats to Water Quality

Due to the presence of thin low-permeability soil, shallow bedrock and seasonal high groundwater levels, the dispersal fields will require additional engineered fill. The engineered fill will allow at least three feet of separation between the dispersal level and ground water. Completion of the Nitrate Checklist in Attachment 1 of Order 2014-0153-DWQ indicates the following flow and rationale:

A1 Exceed 20,000 gpd? No, wastewater flow is generally less than 3,300 gpd, far less than the maximum daily flow allowed.

Conclusion: No nitrogen effluent limit is not required.

Monitoring Requirements

To protect water quality, effluent Limitations for TSS and BOD described in Table 4 of the General Order are applicable for activated sludge systems. Nitrate limits are not required due to anticipated flowrates of less than 20,000 gpd. To ensure the limits of the General Order are met, I recommend the Shasta Wine Village wastewater system be monitored in accordance with the attached Monitoring and Reporting Program (MRP).

R:\RB5\R5RSection\N Central Valley\Cross Section\Clerical\WDR - NON-15 UNIT\RTabor\2015\Shasta Wine Village Tech Memo.docx