CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

for

THE WINE GROUP, LLC - CONCANNON WINERY
at
4596 TESLA ROAD, LIVERMORE, ALAMEDA COUNTY

for

ORDER No. R2-2014-0029

CONTENTS:

Section	Title	Page Numbers
I.	PURPOSE	2
II.	SAMPLING and ANALYTICAL METHODS	2
III.	DEFINITION of TERMS	2 - 5
IV.	DESCRIPTION of MONITORING STATIONS	5 - 8
V.	MONITORING SCHEDULE and SPECIFICATIONS	8 - 12
VI.	REPORTS to be SUBMITTED to the WATER BOARD	12 - 15
VII.	REPORTS to be SUBMITTED to OTHER ENTITIES	15
VIII.	MONITORING PROGRAM CERTIFICATION	16
Table 1	SCHEDULE for MONITORING	17

I. PURPOSE

A. GENERAL

1. This monitoring program is for waste discharge requirements adopted by the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board).

2. The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program (SMP), are:

   a. To document compliance with waste discharge requirements and prohibitions established by the Water Board; and
   b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution or potential threats to water quality arising from waste discharges.

3. Reporting responsibilities of waste dischargers are specified in sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code, and Water Board Resolution No. 73-16.

II. SAMPLING and ANALYTICAL METHODS

1. Sample collection, storage, and analyses shall be performed according to Code of Federal Regulations Title 40, Section 136 (40 CFR 136), or other methods approved and specified by the Executive Officer of the Water Board (Executive Officer).

2. Water and waste analyses shall be performed by a laboratory approved for these analyses by the California Department of Public Health (CDPH), or by a laboratory waived by the Executive Officer from obtaining a CDPH certification for these analyses, or as otherwise specified in this SMP.

3. The director of the laboratory whose name appears on the certification, or his/her laboratory supervisor who is directly responsible for the analytical work performed, shall supervise all analytical work including appropriate quality assurance/quality control procedures in his/her laboratory and shall sign all reports of such work submitted to the Water Board.

4. Measurements by use of portable analytical equipment (field instruments) is acceptable for selected parameters, given the following conditions:

   a. The analytical equipment is appropriate for the given analysis and water or waste;
   b. The analytical equipment is properly maintained and calibrated;
   c. The equipment user is knowledgeable of proper sampling and equipment use practices; and
   d. Written notification of the intended use has been provided in advance to the Water Board and the Water Board has not stated any objections.

5. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

III. DEFINITION of TERMS

The following are definitions and explanations of terms used in this monitoring program. Additional descriptions are given in in the findings of this Order.

A. FACILITY AND WASTEWATER SYSTEM

1. **Facility Site** - The facility site is the land on which the facility identified as The Wine Group, LLC - Concannon Winery (Concannon Winery) is located. This land consists of Alameda County Assessor's parcel numbers 99-1200-001, 99-1200-002, and 99-1200-003.

2. **Wastewater System** - The wastewater system is all equipment at the facility site used for collection, conveyance, treatment, storage, dispersal, and management of wastewater and wastewater solids from the Concannon Winery facility and includes both the sanitary wastewater and process wastewater systems.

3. **Sanitary Wastewater - North Domestic Wastewater System.** The North Domestic Wastewater System is the wastewater treatment and discharge system serving the North Building, the Tasting Room building, and the public bathroom building. The system is located on Parcel 99-1200-001, 1000 feet north of the building complex. The system includes collection in watertight pipes, primary treatment in a septic tank, secondary treatment and nutrient removal in a proprietary treatment unit, and subsurface dispersal by uniform distribution through pressurized pipe networks in a set of four elevated mound structures.

4. **Sanitary Wastewater - South Domestic Wastewater System.** The South Domestic Wastewater System is the wastewater treatment and discharge system serving the South Building, the wine tasting facility, wine bar, and the three-bedroom residence. The system is located on Parcel 99-1200-003, 400 feet southeast of the South Building, to the west of the entrance roadway at 4596 Tesla Road. The system includes collection in watertight pipes, primary treatment in a septic tank, secondary treatment and nutrient removal in a proprietary treatment unit, and subsurface dispersal by uniform distribution through pressurized pipe networks in a set of four elevated mound structures.

5. **Winery Process Wastewater System** - The winery process wastewater system collects and treats wastewater from wine manufacturing processes. The treated wastewater is discharged to land in the winery wastewater discharge system (see description under III.A.7. below).

6. **Winery Bottling Wastewater System -** The bottling wastewater system manages wastewater from the wine bottling operations. The treated wastewater from this system is discharged to land in the winery wastewater discharge system.

7. **Winery Wastewater Discharge System -** The winery wastewater discharge system is the portion of the facility wastewater systems used to convey and discharge combined treated winery process and bottling wastewater to land, by means of a subsurface dispersal system. The dispersal system is located on Parcel 99-1200-001, twenty feet north of the North Building and extending north about 250 feet. The dispersal system includes 16 trenches three-feet deep by three feet wide by 120 feet long, in two zones of eight trenches each, with a total of 1,920 lineal feet of trench and 5,760 square feet of trench bottom infiltrative surface within a gross dispersal system area of 260 feet by 100 feet or 26,000 square feet total.

B. TYPES OF SAMPLES

1. **Flow Measurement** - Flow measurement is the accurate measurement of the flow volume over a given period of time using a properly calibrated and maintained flow measuring device. Flow determination from a properly calibrated and maintained automated pump-use recording device, such as a pump dose event counter, for a properly calibrated and maintained pump, is acceptable.

2. **Grab Sample** - A grab sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples are used primarily in determining compliance with instantaneous maximum or minimum limits, and also for bacteriological limits. Grab samples represent only the condition that exists at the time the sample is collected.

3. **Composite Sample -** A composite sample is defined as a sample composed of individual grab samples, typically of uniform volumes obtained at specified time intervals evenly distributed over the sampling period. The sampling period for all composite samples is 24 hours, unless specified otherwise.

4. **Groundwater Level** - Groundwater level is the water surface of observed groundwater. For reporting, groundwater level shall be reported as both (a) depth below ground surface - the vertical distance between the groundwater level and the overlying ground surface, and (b) groundwater elevation - the elevation of the groundwater level with respect to a single common reference elevation for which there is an identified fixed stable elevation reference station at the facility site.

5. **Groundwater Sample** - A groundwater sample is a sample of groundwater obtained from a groundwater monitoring well for analytical characterization. Sampling of groundwater shall be conducted in accordance with current accepted standard practices for groundwater sampling.

6. **Observations -** Observations are primarily visual observations and inspection of conditions. Observations may include recording measurements from monitoring devices such as freeboard determined from a water level staff gauge, or precipitation determined from a rain gauge.

C. SAMPLING FREQUENCY

1. **Continuous.** Continuous monitoring.
2. **Daily.** One time each calendar day.
3. **Weekly.** One time per calendar week, with sampling interval of at least five days.
4. **Monthly.** One time per calendar month, with sampling intervals of at least three weeks.
5. **Quarterly.** One time per calendar quarter, at intervals of about three months.
6. **Semiannual.** Two times per calendar year, with sampling intervals of about six months.
7. **Annual.** One time per calendar year.

D. MONITORING PERIODS

For purposes of monitoring, reporting and compliance determinations relevant to requirements specified in this Order and SMP, the following time periods apply:

1. **Daily.** The Daily time period is a 24-hour period associated with a calendar day. The 24-hour period may overlap calendar days (e.g., 8 am of one day to 8 am of the next), but shall be consistent from one sampling event to the next.
2. **Weekly.** The Weekly period is a 7-day calendar week.
3. **Monthly.** The Monthly time period is each respective calendar month.
4. **Annual.** The Annual time period is the calendar year.
5. **Wine Grape Crush Season.** The calendar period of August 1 through December 31.

E. ABBREVIATIONS USED IN TABLE 1, SCHEDULE FOR MONITORING

1. **Type of Sample Abbreviations.**

C = Composite Sample
F = Flow measurement
G = Grab Sample
GL= Ground water level measurement.
O = Observation.

2. **Parameter Abbreviations.**

BOD_5 20^oC = Biochemical Oxygen Demand, 5-day, at 20 ^oC
TSS = Total Suspended Solids

3. Unit Abbreviations.

F or C	=	Fahrenheit or Celsius
mg/L	=	milligrams per liter
MPN/100 ml	=	Most Probable Number, per 100 milliliters
N	=	Nitrogen

4. Sampling Frequency Abbreviations.

D	=	Daily	A	=	Annual
W	=	Weekly	Cont.	=	Continuous
M	=	Monthly	Event	=	Each service or discharge event
Q	=	Quarterly	2/M	=	Twice per Month
D&M	=	Continuous monitoring; Record and Report Daily & Monthly values			

5. Other Abbreviations.

WW	=	Wastewater
PW	=	Winemaking Process Wastewater
BW	=	Wine Bottling Operation Bottling Wastewater
SW	=	Sanitary Wastewater
Crush	=	Wine Grape Crush Season
Noncrush	=	All time other than Wine Grape Crush Season

IV. DESCRIPTION of MONITORING STATIONS

A. GENERAL

1. **Monitoring Station Definitions**. Stations to be used for sampling and observations in this SMP are described in this section. Each station is identified by a station code and station description. The Station Code is a reference code for station identification in this SMP and in recording and reporting of monitoring data. The Station Description is a description of the water, wastewater, point of the wastewater system, or land area where specified monitoring is to be conducted.

2. **Monitoring Station Changes.** Changes to the monitoring stations defined in this SMP may be authorized by the Executive Officer in order to accommodate changes in the wastewater system or wastewater system operations or to provide improved monitoring. Requests for changes to the monitoring stations must be submitted to the Water Board in writing, with a detailed explanation of the purpose of the proposed station changes. Proposed changes to monitoring stations must be approved in writing from the Executive Officer prior to implementation.

3. **Site Plan Showing All Monitoring Stations.** The Discharger shall develop a scaled and legible plan view drawing of the facility site that clearly shows the locations of all major components of the wastewater system, all monitoring stations identified in this SMP, and relevant land use features such as buildings, access roads, property boundaries, and surface water drainage systems. A copy of this drawing shall be included with all reports submitted in response to this SMP.

B. WASTEWATER SYSTEM MONITORING STATIONS

Sanitary Wastewater

1. North Domestic Wastewater System - Influent

a. Station Code: 1
b. Station Description: Wastewater at a point in the sanitary wastewater system where all sanitary wastewater from the Concannon Winery tributary to the North Domestic Wastewater System is present.

c. Purpose: The purpose of this station is for sampling and analytical characterization, and flow measurement as necessary, to monitor and evaluate system performance.

2. North Domestic Wastewater System - Effluent

a. Station Code: 2
b. Station Description: Wastewater at a point in the sanitary wastewater system where all treatment is complete prior to discharge to land.
c. Purpose: The purpose of this station is for sampling and analytical characterization, and flow measurement as necessary, to monitor and evaluate system performance.

3. North Domestic Wastewater System - Discharge System

a. Station Code: 3
b. Station Description: The wastewater discharge system and the included land area used for discharges of treated wastewater to land.
c. Purpose: The purpose of this station is for standard observations of discharge system conditions.

4. South Domestic Wastewater System - Influent

a. Station Code: 4
b. Station Description: Wastewater at a point in the sanitary wastewater system where all sanitary wastewater from the Concannon Winery tributary to the South Domestic Wastewater System is present.
c. Purpose: The purpose of this station is for sampling and analytical characterization, and flow measurement as necessary, to monitor and evaluate system performance.

5. South Domestic Wastewater System - Effluent

a. Station Code: 5
b. Station Description: Wastewater at a point in the sanitary wastewater system where all treatment is complete prior to discharge to land.
c. Purpose: The purpose of this station is for sampling and analytical characterization, and flow measurement as necessary, to monitor and evaluate system performance.

6. South Domestic Wastewater - Discharge System

a. Station Code: 6
b. Station Description: The wastewater discharge system and the included land area used for discharges of treated wastewater to land.
c. Purpose: The purpose of this station is for standard observations of discharge system conditions.

Winery Wastewater

7. Winery Process Wastewater

a. Station Code: 7
b. Station Description: Wastewater at a point in the winery process wastewater system following all treatment units and prior to subsurface discharge where all wastes tributary to the discharges are present. The ROWD identifies this station as the 2,000-gallon capacity pump tank prior to the rotary screen.
c. Purpose: The purpose of this station is for sampling and analytical characterization, and flow measurement, of winery process wastewater discharged to land in the winery wastewater system.

8. Bottling Plant Wastewater

a. Station Code: 8
b. Station Description: Wastewater at a point in the bottling plant wastewater system following all treatment units and prior to subsurface discharge where all wastes tributary to the discharges are present. The ROWD identifies this station as the 3,100-gallon capacity pump tank prior to the rotary screen.

c. Purpose: The purpose of this station is for sampling and analytical characterization, and flow measurement, of bottling plant wastewater discharged to land in the winery wastewater system.

9. Winery Wastewater after Rotary Screen

a. Station Code: 9
b. Station Description: Wastewater at a point in the winery wastewater system after, and downstream from, all treatment units including the rotary screen, prior to subsurface discharge, where all wastes tributary to the discharges are present.
c. Purpose: The purpose of this station is for sampling and analytical characterization of the quality of the final treated winery wastewater discharged to land.

10. Winery Wastewater System Discharge Area

a. Station Code: 10
b. Station Description: Points within and around the perimeter of the winery wastewater system discharge area suitable for observation of discharge area conditions.
c. Purpose: The purpose of these stations is for standard observations of the subject discharge area.

11. Winery Process Area Stormwater Diversion Valve

a. Station Code: 11
b. Station Description: The diversion valve and related control equipment used to direct winery process wastewater discharges in the outdoor process area to either the winery wastewater discharge system or to the onsite stormwater subsurface discharge system.
c. Purpose: The purpose of this station is for monitoring which specific subsurface dispersal system is in active use for the winery process wastewater collected in the outdoor processing area.

12. Winery Wastewater Discharge System Diversion Valve

a. Station Code: 12
b. Station Description: The diversion valve and related control equipment used to direct winery wastewater discharges to one part or the other of the subsurface dispersal system.
c. Purpose: The purpose of this station is for monitoring which specific infiltrator chambers of the subsurface dispersal system are in active use for discharges and all dates and times when the flow stream is changed.

13. Wastewater Tanks (Septic Tanks, Pump Tanks, Holding Tanks)

a. Station Description: Each tank within the facility used for control of wastewater.
b. Inventory: All tanks within the facility shall be inventoried. The inventory shall include as-built, installed tank locations and characteristics. Location information shall include descriptions with respect to a current facility site plan drawing or map and map coordinates of each tank access port. Characteristics shall include dimension and capacities, inlets and outlets, origin, manufacturer, purpose, and date of installation, and dates and purposes of any changes.
c. Monitoring: Each tank shall be monitored for tank use and service. Monitoring and reporting will include all service events, purpose, date and time, service provider, waste hauler, volume of material removed, and final point of discharge destination.
d. Purpose: The primary purpose of these stations is for monitoring conditions and use of all tanks within the wastewater system and the proper operation and maintenance of these wastewater system components.

14. Wastewater Fixtures and Drains

a. Station Description: Each plumbing fixture or drain within the facility used for control of wastewater.
b. Inventory: All plumbing fixtures and drains within the facility used for control of wastewater shall be inventoried. The inventory shall include as-built, installed tank locations and characteristics. Location information shall be described with respect to a current facility site plan drawing or map. Characteristics

shall include dimension and capacities, inlets and outlets, origin, manufacturer, purpose, date of installation, and dates and purposes of any changes.

c. Monitoring: Each fixture and drain system shall be monitored for use and service. Monitoring and reporting will include all service events, purpose, date and time, service provider, waste hauler, volume of material removed, and final point of discharge destination.

d. Purpose: The primary purpose of these stations is for monitoring condition and use of all points of wastewater entry into the wastewater system and the proper operation and maintenance of these wastewater system components.

C. GROUNDWATER MONITORING STATIONS

1. Performance Wells.

a. Station Code: PW- n (n = 1,2,3,4, etc.)

b. Station Description: Performance wells installed around the area of each wastewater system subsurface discharge system.

2. Downgradient Well 1.

a. Station Code: MW-1

b. Station Description: Groundwater at a monitoring well located downgradient from the Winery Wastewater System and South Domestic Wastewater System, along the northern boundary of the facility site and about 850 feet east from the western corner of the facility site.

c. Purpose: The purpose of these stations is for observation and measurement of groundwater levels and for obtaining samples of groundwater for analytical characterization of groundwater quality.

d. Location and Construction: The location and construction characteristics of this well shall be as specified in the technical report, "Monitoring Well Installation Work Plan, The Wine Group, Concannon Winery, Livermore, California, 4 October 2012", prepared for The Wine Group by Kennedy Jenks Consultants of San Francisco.

3. Downgradient Well 2.

a. Station Code: MW-2

b. Station Description: Groundwater at a monitoring well located downgradient from the North Domestic Wastewater system, along the northern boundary of the facility site and about 2,800 feet east from the western corner of the facility site.

c. Purpose: The purpose of this station is for observation and measurement of groundwater levels and for obtaining samples of groundwater for analytical characterization of groundwater quality.

d. Location and Construction: The location and construction characteristics of this well shall be as specified in the technical report, "Monitoring Well Installation Work Plan, The Wine Group, Concannon Winery, Livermore, California, 4 October 2012", prepared for The Wine Group by Kennedy Jenks Consultants of San Francisco.

4. Upgradient Wells.

a. New wells to be installed or wells owned and maintained by the Zone 7 Water Agency, identified as Well 15R17 and Well 22B1.

b. Station Description: Groundwater monitoring wells located upgradient from the wastewater system discharge areas.

V. MONITORING SCHEDULE and SPECIFICATIONS

A. MONITORING SCHEDULE

1. Table 1. The Discharger is required to perform sampling, analyses and observations according to the schedule tabulated in **Table 1 - Schedule for Monitoring**, given at the last page of this SMP, and the associated Monitoring Specifications given in Section V.B. below.

2. **Table 1 References.** Table 1 includes references given in parentheses to the right of the parameter name. These references correspond to monitoring specifications given below in Section V.B. or V.C below.

B. WASTEWATER MONITORING

1. **Flow Monitoring and Reporting**
   a. All flows shall be monitored continuously in a manner sufficient to measure, record, and report the daily flow volume for each day of operation and the monthly flow volume for each calendar month.
   b. Flows shall be reported as Daily Flow in gallons, for each day when flow occurs, and Monthly Flow in gallons, for each calendar month.
   c. EVENT flow monitoring is to characterize flows into or out of the wastewater system during special events such as service or repair or replacement of components.

2. **Additional Monitoring May be Needed**
   The monitoring requirements established in this SMP are minimum requirements. Additional monitoring for any parameter may be necessary and prudent to assure proper wastewater system performance and compliance with WDRs.

3. **Winery Process Wastewater Monitoring**
   a. During the non-wine grape crush season, winery process wastewater monitoring frequency shall be monthly for BOD, TSS, and Nitrogens.
   b. During the wine grape crush season, winery process wastewater monitoring frequency shall be conducted twice per month for BOD, TSS, and Nitrogens.

4. **Nitrogens**
   a. The parameter 'Nitrogens' in this SMP means all of the following parameters:

      1) Ammonia Nitrogen,
      2) Nitrate Nitrogen,
      3) Total Kjeldahl Nitrogen (TKN), and
      4) Total Nitrogen.

   b. Analytical results for the above nitrogen parameters shall be reported as mg/L as nitrogen.
   c. Determination of compliance with the limit specified in this Order for Total Nitrogen shall be made against the sum of the analytical results for Nitrate Nitrogen and Total Kjeldahl Nitrogen (TKN).

5. **Precipitation** - Precipitation (rainfall) monitoring shall be continuous and recorded and reported as total rainfall for each calendar day and as the total for each calendar month. Precipitation monitoring shall be representative of precipitation falling on the discharge areas.

6. **Winery Process Area Stormwater Diversion Valve Operation.**
   For each event when the valve is operated, for any reason, the following shall be reported:

   a. Calendar date and time of the event;
   b. Actions taken;
   c. Person that made the change and Operator in charge; and
   d. New status, after changes are completed, e.g., final destination of wastewater passing through the valve -- either to the winery wastewater system or to the stormwater system.

7. **Winery Wastewater Discharge System Diversion Valve Operation**
   For each event when the valve is operated, for any reason, the following shall be reported:

   a. Calendar date and time of the event;

b. Actions taken;
c. Person that made the change and operator in charge; and
d. New status after changes are completed, e.g., which discharge system area is in active use and which area is in no-discharge/"rest" mode.

8. Tank Service Event Data

For each service event involving inspection of and/or service of a wastewater system tank, the following shall be reported:

a. Calendar date of the service event;
b. Times of day when service started and stopped;
c. Component serviced (equipment code, name, or narrative description);
d. Purpose of service event;
e. Service provider;
f. Total volume of material removed;
g. Final destination point of disposal (e.g., specific municipal wastewater treatment plant);
h. Total water depth;
i. Scum (floating) and solids (settled) thickness; and
j. Inspection of tank for structural and watertight integrity.

9. Standard Observations - Domestic Wastewater System

a. Check (smell) area for odors.
b. Check area for evidence of any standing water or surfacing wastewater.
c. Check area perimeter for proper hydraulic containment of wastewater. Note any seepage. Note any concentrated runoff flows.
d. Check all visible distribution system components for proper condition and hydraulic integrity.
e. Check grass for proper maintenance (mowing). Record approximate height of grass.
f. Check perimeter for integrity and proper condition of all discharge control and monitoring systems.

10. Standard Observations - Winery Wastewater System

a. Check (smell) area for odors.
b. Check area for evidence of any standing surface water (ponded water).
c. Check for evidence of mosquitoes breeding within the area due to standing water.
d. Check all visible distribution system components for proper condition and hydraulic integrity.
e. Check discharge area runoff containment systems (berms and/or subsurface drains) for proper condition and integrity. Note and record any evidence of any wastewater escaping the discharge area.
f. Check perimeter for integrity and proper condition of all discharge control and monitoring systems.

11. "Startup" Monitoring: Monitoring frequencies shown in Table 1 are intended to indicate routine standard monitoring frequencies. Additional monitoring may be necessary or appropriate for any parameter depending on conditions at the time. During any time when a wastewater system routine operation is changed, including partial or complete shut-down for equipment or process operation and maintenance and subsequently returned to routine operation, monitoring shall be conducted in the ”Startup” mode. “Startup” mode includes (a) Increased Monitoring Frequency as given in section D below, and (b) continuing for at least two months after system restart or continuing longer if necessary until stable operations are achieved.

12. Wastewater System Tank, Fixture, and Drain Inventory

a. Inventory: The Discharger shall complete an inventory of all tanks, drains, and plumbing fixtures within the facility used for the control of wastewater. The inventory shall include as-built, installed tank locations and characteristics. Location information shall include a cross-reference to a current facility site plan, drawing, or map, and map coordinates of each tank access port. Characteristics shall include

dimension and capacities, inlets and outlets, origin, manufacturer, purpose, and date of installation and dates, and times of any changes.

b. Report: The Discharger shall submit a technical report to the Water Board with the complete results of the inventory described in 12.a above.

c. Report Schedule : The report described in 12.b above shall be submitted to the Water Board no later than 30 days after adoption of this Order.

C. GROUNDWATER MONITORING PROGRAM

The Discharger is required to implement a program of groundwater monitoring in the vicinity of the wastewater discharge areas in accordance with the following. The groundwater monitoring system consists of performance wells and groundwater monitoring wells:

1. **Performance Wells -** Performance Wells are installed around the leachfields for the process water and domestic wastewater systems:

   a. Water level measurements shall be measured in the performance wells quarterly.

   b. If water is present in a performance well downgradient of wastewater system, samples shall be taken by the Discharger. Samples shall be taken after the well has been properly purged. The samples shall be analyzed for the same set of of parameters identified for downgradient monitoring wells, in 2.c below.

2. **Groundwater Monitoring Wells**

   a. Groundwater is monitored at two upgradient and two downgradient monitoring wells:

      i. Downgradient wells: Wells MW-1 and MW-2, owned and maintained by the Discharger.

      ii. Upgradient wells: The Discharger shall install two upgradient wells or monitor wells 15R17 and 22B1, owned and maintained by Zone 7, with permission.

   b. Downgradient and upgradient monitoring wells shall be monitored by the Discharger as follows:

Constituents	Units	Type of Sample	Frequency (a)
Depth to Groundwater	0.01 feet	Measurement	Quarterly
Groundwater Elevation	0.01 feet	Calculation	Quarterly
Gradient	feet/feet	Calculation	Semiannual
Nitrate as Nitrogen	mg/L	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly
Specific Conductivity	umhos/cm	Grab	Quarterly
pH	pH units	Grab	Quarterly
General Minerals (b)	mg/L	Grab	Annually

   (a) Sample dates shall coincide with upgradient monitoring events.

   (b) The parameter General Minerals includes the following: calcium, magnesium, sodium, chloride, potassium, sulfate, total alkalinity (including alkalinity series), and total hardness.

D. INCREASED MONITORING FREQUENCY

If any monitoring indicates a violation of waste discharge requirements or unstable wastewater system operation or performance, or if any specified samplings or analyses are not completed as required, then the monitoring for the parameter(s) and monitoring station(s) in concern shall immediately and henceforth be conducted at twice the frequency identified in Table 1 of this SMP. This increased monitoring frequency shall be maintained for at least two sampling events and until such time as the results of monitoring indicate

violations are no longer occurring or the problem has been corrected and the wastewater system has returned to stable operation and performance.

E. MONITORING BY USE OF AUTOMATED INSTRUMENTS

Selected parameters may be monitored by the use of automated analytical instruments, provided such instruments are properly maintained and calibrated to ensure accurate measurements, and that these instruments and their use is documented in the Operation and Maintenance Program Manual and written approval by the Executive Officer has been provided.

F. MODIFICATION OF MONITORING PRACTICES

Modifications of the monitoring practices specified in this SMP may be authorized by the Executive Officer, in consideration of acceptable accumulated data and acceptable alternate means of monitoring. Factors to be considered include: data quality, adequate characterization of the identified water or wastewater system process, consistency of system performance, compliance with waste discharge requirements, and acceptable means for providing equivalent and adequate monitoring of the identified water or wastewater system process. Requests for modification of monitoring practices must be submitted to the Water Board in writing, with a technical report that includes evaluation of accumulated data, and a complete description of proposed alternate means of monitoring. Proposed modifications of monitoring practices must be approved in writing from the Executive Officer prior to implementation.

VI. REPORTS to be SUBMITTED to the WATER BOARD

A. MONITORING REPORTS

The Discharger shall submit to the Water Board monitoring reports documenting the wastewater system operation and performance, and compliance with waste discharge requirements, in accordance with the following:

1. **Report Schedule.**
   a. **Monthly Reports.** Written reports shall be prepared for each calendar month and shall be submitted to the Water Board by the last day of the month following the monitoring period.

   b. **Annual Reports.** Written reports shall be prepared for each year and shall be submitted to the Water Board by the last day of the second month following the monitoring period.

   c. **Future Quarterly Reports.** The Discharger may request that the monthly report schedule be changed to a quarterly report schedule after a period of at least two years of successful demonstration of wastewater system operation maintenance and monitoring in accordance with this SMP and monthly reporting schedule. The request shall be made by letter to the Executive Officer. Approval, if warranted, shall be made by written correspondence from the Executive Officer. Quarterly reports shall be submitted for each calendar quarter and submitted to the Water Board by the last day of the month following the monitoring period.

2. **Transmittal Letter.**
   A letter of transmittal shall accompany each monitoring report submitted to the Water Board. The transmittal letter shall include the following:

   a. **Identification.** Identification of the following:

      1) The discharge facility by name and address;
      2) The monitoring period being reported;
      3) The name and telephone number of a person familiar with the report and the current status of the wastewater system, for followup discussions as may be needed; and
      4) The name of the Water Board staff case handler.

b. Operation and Maintenance Activities. Discussion of all significant wastewater system operation and maintenance activities that occurred during the reporting period (e.g., pumping of septic tanks, repair or replacement of system equipment), including dates and reasons for such activities.

c. Violations or Problems. Discussion of any violations of waste discharge requirements, and any problems or unusual conditions, that occurred during the reporting period. This shall include reporting of the following information:

1) Date and time of occurrence;
2) Location of occurrence, shown on a scaled plan drawing of the facility site;
3) Description of the violation, problem, or unusual condition;
4) Corrective actions taken or planned to correct the violation, problem, or unusual condition and a time schedule for implementation of these actions. Actions may include increased monitoring and any changes to wastewater system equipment or operations.

If a report describing corrective actions and/or a time schedule for implementation of those actions was previously submitted to the Water Board, then reference to that report is satisfactory. References to other reports shall include the date, title or subject, and author of the referenced report.

d. Transmittal Letter Signature(s). The transmittal letter shall be signed by: 1) the Discharger's principal executive officer, ranking elected official, or duly authorized representative, and 2) the wastewater system chief plant operator, with the following certification statement:

"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. 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."

3. Results of Analyses and Observations.
Each report shall include results of analyses and observations in accordance with the following:

a. Monitoring Results. Each monitoring report shall include tabulations of results from all required analyses, measurements and observations specified in this SMP for the reporting period, including:

1) Date of sampling or observation;
2) Location of sampling or observation (sample station);
3) Parameter of analysis (e.g., pH, Dissolved Oxygen, etc.); and
4) The result of the analysis, measurement or observation.

b. Data Presentation. In reporting monitoring data, the data shall be arranged in tabular form so that the data are clearly discernible. The data shall be summarized in a manner to illustrate clearly whether the discharge is in compliance with waste discharge requirements and this SMP. Reporting shall include maximum, minimum and monthly average values for each parameter for which more than one sample result is obtained during the monitoring period.

c. Sample Analysis Data. For all sample analyses, include the following:

1) Date of analysis;
2) Individual or contract laboratory conducting the analysis;
3) Analytical procedure or method used, and test method detection level; and
4) Copies of laboratory analysis result reports for all analyses conducted by a contract laboratory.

d. Reporting Results Below Detection Limits. For all analytical characterizations (laboratory tests) for which results are identified as below limits of detection of the test procedure, data reporting shall include the limit of detection. In other words, reporting a sample test result as only "ND", or "not detected" or similar, is not acceptable; the actual numeric value of the detection limit must also be reported. It is acceptable to use notations of non-detection - "ND" or similar - in data tables, provided that the corresponding limit of detection is clearly identified elsewhere in the table or as a footnote of the table.

e. Additional Monitoring Results. If any parameter is monitored more frequently than is required by this SMP, then the results of such monitoring shall be included in the monitoring reports and in any calculations of statistical values.

4. Identification of Monitoring Stations.
Each report shall include a scaled and legible plan view drawing of the facility site that shows the locations of all monitoring stations at which monitoring is required by this SMP.

5. Monitoring During Wastewater System Modifications.
Whenever any modifications to the wastewater system occur, the monitoring report shall include a description of work that has occurred during the monitoring period, any impacts to the wastewater system operations, and, if work is incomplete, the anticipated completion schedule.

6. Annual Monitoring Reports.
The annual monitoring report shall include the following:

a. Tabular and graphical summaries of the monitoring data obtained during the period being reported.
b. A discussion of wastewater system performance and record of compliance with the requirements specified by this Order, including monitoring and reporting requirements.
c. A complete discussion of groundwater monitoring results, including evaluation of groundwater movement, changes in groundwater levels and quality, and evaluation of any observed changes with respect to the wastewater discharges.
d. For any event of non-compliance with requirements specified by this Order, including monitoring and reporting requirements, the report shall include description of corrective actions taken or planned to achieve full compliance, and a time schedule of when those actions were or will be taken.

B. REPORTS OF VIOLATIONS

If the Discharger violates or threatens to violate waste discharge requirements or this SMP due to:

1. Maintenance work, power failure, or breakdown of wastewater system equipment;
2. Accidents caused by human error or negligence; or
3. Other causes such as acts of nature, then:

the Discharger or Discharger's agent(s) shall notify the Water Board office by telephone as soon as the Discharger or Discharger's agent(s) have knowledge of the incident. Written notification shall be submitted within two weeks of the date of the incident, unless directed otherwise by Water Board staff. The written notification shall include pertinent information explaining reasons for the non-compliance and what steps were taken to correct the problem, and the dates thereof, and what steps are being taken to prevent the problem from recurring.

C. REGIONAL WATER BOARD ADDRESS and PHONE NUMBER

This Water Board's current office mailing address and phone number is given below. This is the address to be used for submittal of reports and correspondence to the Water Board:

1. Address: California Regional Water Quality Control Board, San Francisco Bay Region

1515 Clay Street, Suite 1400, Oakland, CA 94612

2. **Phone number:** (510) 622 - 2300; Fax: (510) 622 - 2460.

VII. REPORTS to be SUMBITTED to OTHER ENTITIES

A. Alameda County

The north and south domestic wastewater systems were designed and permitted via the Alameda County (County) Onsite Wastewater Treatment System and Individual/Small Water System Regulations. The two systems will be maintained and regulated in accordance with County ordinance, including but not limited to the following:

1. The property owner must conduct a visual and operational inspection of the Systems once every six months to monitor the performance of the Systems. The County may inspect the Systems and/or sample performance and monitoring wells. The County may require the Discharger to sample monitoring and performance wells. At a minimum, samples taken by the Discharger and/or the County from the performance wells must be tested for total and fecal coliform. Test results from such annual samples must be provided to the County. Additional testing may be required by the County. Analysis must be paid for by the Discharger and must be conducted by a California State Approved Water Testing Laboratory.

2. The Discharger or Registered Professional or Licensed Contractor authorized by the Discharger must submit an annual written report to the County with the following information for the Systems:

   a. Water flow readings, every six months, of the wastewater flow into the Systems. Appropriate flow measurement devices must be installed.

   b. Findings of the annual inspections of the sump and pump system must include:

      1) Proper operation water-tightness
      2) Proper function of the alarm system
      3) Pump run cycle time
      4) Verification of the flow measurement device performance, and calibration as necessary, to ensure accurate flow measurement data.

   c. Findings of the inspection of the Systems must include:

      1) Breakout or surfacing of wastewater on the ground
      2) Testing and condition of the adjusting and purge valves
      3) Testing and condition of the performance wells
      4) Any repairs, modifications, additions, or deletions to any component of the Systems and any significant alterations to the ground surface in the area of the Systems that may affect the Systems including but not limited to grading, paving, or installing structures.

   d. Test results from annual nitrate samples shall be provided from the point of discharge of the pretreatment unit.

   e. The Discharger or Registered Professional or Licensed Contractor authorized by the Discharger must submit a written report, every two years, to the County detailing that the Systems continue to function as designed and are functioning properly.

B. Zone 7 Water Agency

The Discharger shall submit to Zone 7 a copy of the Annual Monitoring Report as specified in Part VI.A.6.

VIII. MONITORING PROGRAM CERTIFICATION

I, Bruce H. Wolfe, Executive Officer, hereby certify that this Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Water Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements for the subject wastewater systems.
2. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Discharger, and revisions will be ordered by the Executive Officer.
3. Is effective on the following date: July 9, 2014.

Digitally signed by Bruce H. Wolfe
DN: cn=Bruce H. Wolfe, o=SWRCB, ou=Region 2, email=bwolfe@waterboards.ca.gov, c=US
Date: 2014.07.11 17:07:43 -07'00'

BRUCE H. WOLFE
Executive Officer

[Water Board electronic file number (CIWQS Place Number) for this facility is: 771359.]
[Water Board staff author is Blair Allen.]

TABLE 1 - SCHEDULE for MONITORING

Monitoring Stations:			1	2	4	5	7	7	8	9	11& 12	3, 6, 10	13	14	MW-1, MW-2, & Up-gradient Wells
			North Domestic. Influent	North Domestic. Effluent	South Domestic. Influent	South Domestic. Effluent	Process WW-Non-Crush	Process WW - Crush Season	Bottling WW	Combined Winery WW	Diversion Valves	Discharge Areas	WW Tanks	WW Drains, etc.	Ground water Wells
Type of Sample:			F	F, G	F, G	F, G	F, C	F, C	F, G	F, G	O & M	O	F, O	O	G, GL
Parameter	**(units)**	**[Reference]**													
Flow Volume	(gallons)	[V.B.1]	D&M	D&M	D&M	D&M	D&M	D&M	D&M	D&M	Event		Event	Event	
$BOD_5 20^oC$	(mg/L)	[V.B.3]		M		M	M	2/M	M	M					
TSS	(mg/L)	[V.B.3]		M		M	M	2/M	M	M					
Temperature	(degrees F or C)			M		M				M					
pH	(pH units)			M		M	M	2/M	M	M					Q
Dissolved Oxygen	(mg/L)			M		M				M					
Nitrogens	(mg/L as N)	[V.B.3 & 4]	M	2/M	M	2/M	M	2/M	M	M					Q
Total Dissolved Solids	(mg/L)			M		M		2/M	M	M					Q
Specific Conductivity	(micromhos/cm)			M		M		2/M	M	M					Q
General Minerals		[V.C.2]													A
Ground Water Level	(feet)	[V.C.2]													Q
Precipitation	(inches)	[V.B.5]										D &M			
Diversion Valve Operation		[V.B.6 & 7]									Event				
Service Event Data (Date, Time, etc.)		[V.B.8]								Event	Event	Event	Event	Event	
Standard Observations		[V.B.9 & 10]										M			