CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

for

COSENTINO WINERY, COSENTINO WINERY LLC
and COSENTINO WINERY
WASTEWATER TREATMENT SYSTEM,
7415 ST. HELENA HIGHWAY, NAPA COUNTY

for

ORDER NO. R2-2006-0076

CONTENTS:

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 (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 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 Board Resolution No. 73-16.

II. SAMPLING and ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to Code of Federal Regulations Title 40, Section 136 (40 CFR S136), or other methods approved and specified by the Executive Officer of the Board (Executive Officer).

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

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 Board.

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

1. The analytical equipment is appropriate for the given analysis and water or waste;
2. The analytical equipment is properly maintained and calibrated;
3. The equipment user is knowledgeable of proper sampling and equipment use practices; and
4. Written notification of the intended use has been provided in advance to the Board, and no the Board has not stated any objections.

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.

A. FACILITY AND WASTEWATER SYSTEM.

NOTE: The following are simplified descriptions, for reference purposes. Additional, more complete, descriptions are given in the findings of this Order.

1. **Facility Site.** The facility site is the land parcel on which the Cosentino Winery facility is located, Napa County Assessors Parcel Number 27-540-013.

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 Cosentino Winery facility, and includes both the sanitary wastewater and process wastewater systems.

3. **Sanitary Wastewater Discharge Area.** The sanitary wastewater discharge area is the area on the facility site, at the south side of the winery building, within which treated sanitary wastewater is discharged to land by means of a subsurface drip dispersal system pipe network.

4. **Sanitary Wastewater Discharge System.** The sanitary wastewater discharge system is the portion of the sanitary wastewater system used to convey and discharge treated sanitary wastewater to land.

5. **Process Wastewater Pond.** The winery process wastewater pond is an aerated pond constructed of earth berms extending above native ground level, with an internal baffle wall, and mechanical aerators, located at the south corner of the facility site, used for treatment and storage of winery process wastewater.

6. **Process Wastewater Discharge Area.** The process wastewater discharge area is the area of vineyards on the facility site within which treated winery process wastewater is discharged to land by means of an above-ground drip irrigation system.

7. **Process Wastewater Discharge System.** The process wastewater discharge system is the portion of the process wastewater system used to convey and discharge treated winery process wastewater to land.

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. In a flow-weighted composite, the grab samples are mixed in proportions varying not more than plus or minus five percent from the instantaneous rate of waste flow corresponding to each grab sample collected at regular intervals not greater than one hour, or collected by the use of continuous automatic sampling devices capable of attaining the proportional accuracy stipulated above throughout the sampling period. In a time-sequenced composite sample, individual grab samples of specified volume, typically uniform, are obtained at specified time intervals, typically uniform. The sampling period for all composite samples is 24 hours, unless specified otherwise in this SMP or in writing by the Executive Officer.

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. **Pond Water Depth.** Pond water depth is the vertical distance between the free water surface of the water contained in the pond, and the bottom of the water volume contained in the pond.

7. **Pond Freeboard.** Pond freeboard is the vertical distance between the free water surface of the water contained in the pond, and the elevation of the lowest point of the top of the water containment structure (i.e., the elevation at which water would overflow from the pond).

8. **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.

Continuous = Continuous monitoring.
Daily = One time each calendar day.
Weekly = One time per calendar week, with sampling interval of at least five days.
Monthly = One time per calendar month, with sampling intervals of at least three weeks.
Quarterly = One time per calendar quarter, at intervals of about three months.
Twice per Month = Two times per calendar month, with sampling intervals of at least ten days.

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 from April 1 of one calendar year through March 31 of the next following calendar year.
5. **Wine Grape Crush Season.**
   For purposes of this monitoring program, the wine grape crush season is defined as follows:
   - **a.** The calendar period of August 1 through December 31, unless acceptable documentation of actual wine grape crushing activity is provided to the Board, as described in b below.
   - **b.** IF documentation of grape crushing activity is provided to the Board, and found to be acceptable to the Executive Officer, THEN the wine grape crush season shall be the period extending from the date of the first delivery of grapes to the Cosentino Winery facility through seven days after the date of completion of all grape crushing activity and associated clean-up, dismantling and storage of all grape crushing equipment. Documentation shall be submitted to the Board annually.

E. ABBREVIATIONS USED IN TABLE 1, SCHEDULE FOR MONITORING.

1. Type of Sample Abbreviations.

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

2. Parameter Abbreviations.

BOD_5 20°C = Biochemical Oxygen Demand, 5-day, at 20 °C
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	Cont.	=	Continuous
W	=	Weekly	D&M	=	Daily and Monthly
M	=	Monthly	Event	=	Each service or discharge event
Q	=	Quarterly	2/M	=	Twice per Month

Cont: D&M = Continuous monitoring; Record and Report Daily & Monthly values

5. Other Abbreviations.

PW = Process Wastewater (winery process wastewater)
SW = Sanitary Wastewater
RTF = Sanitary Wastewater System Recirculating Textile Filter Treatment System
Crush = Wine Grape Crush Season
Noncrush = All time other than Wine Grape Crush Season

F. STANDARD OBSERVATIONS.

1. Process Wastewater Pond.

(a) Measure and record pond water depth and pond freeboard, in feet and inches.
(b) Determine and record wind velocity and direction.
(c) Observe and record water color.
(d) Check (smell) for nuisance odors. If detected, record description and apparent source & cause.
(e) Check all aerators for operational status. Note whether operating or not. Record and report each and every time (calendar date and time of day) when any aerator is turned on or off.
(f) Check entire pond perimeter, both internal and external sides of berms, for structural and hydraulic integrity, including evidence of any seepage, leaks, or other improper condition of the pond structure and other equipment associated with pond water containment (pipes, valves, depth staff gauge).
(g) Check perimeter fence for integrity and proper closure of all gates.
(h) Check that warning signs are properly posted to inform public that pond water is wastewater which is not safe for drinking or contact.

2. Process Wastewater Discharge Area.

(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.
(g) Check that warning signs are properly posted to inform public that discharge area water is wastewater which is not safe for drinking.

3. Sanitary Wastewater Discharge Area.
(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. During dry season, note any seepage. During wet season, 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.
(g) Check that warning signs are properly posted to inform public that discharge area water is wastewater which is not safe for drinking or contact.

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 Section IV, below. 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 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 which 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. SANITARY WASTEWATER.

1. Cosentino Winery Sanitary Wastewater.

a. Station Code: A-1
b. Station Description: Wastewater at a point in the sanitary wastewater system where all sanitary wastewater from the Cosentino Winery tributary to the sanitary wastewater system is present.
c. Purpose. The purpose of this station is for measuring the total flow of sanitary wastewater from the Cosentino Winery facility, and for determination of compliance with Discharge Specification B.2.a. of this Order.

2. Recirculating Textile Filter Unit Influent.
a. Station Code: A-2
b. Station Description: Wastewater at a point in the sanitary wastewater system prior to the recirculating textile filter (RTF) unit where all wastewater influent to the RTF unit is present.
c. Purpose. The purpose of this station is for sampling and analytical characterization, and flow measurement as necessary, of the RTF Unit influent, to monitor and evaluate RTF performance.

3. Recirculating Textile Filter Unit Recirculation Flow.
a. Station Code: A-3
b. Station Description: Wastewater at a point in the sanitary wastewater system prior to the recirculating textile filter (RTF) unit where all wastewater effluent from the RTF unit that is recirculated back to the RTF unit influent is present, suitable for characterizing the flow rate of recirculated water.
c. Purpose. The primary purpose of this station is for characterization of recirculation flows, to monitor and evaluate RTF performance.

4. Discharges to the Sanitary Wastewater Discharge Area (Final Treated Sanitary Wastewater).
a. Station Code: E-1
b. Station Description: Wastewater at a point in the sanitary wastewater system after, downstream of, all treatment processes, where all treated sanitary wastewater to be discharged to the sanitary wastewater discharge area is present.
c. Purpose. The purpose of this station is for measurement of all flows discharged to the sanitary wastewater discharge area, and for sampling and analytical characterization of the quality of the final treated sanitary wastewater to be discharged to land.

C. PROCESS WASTEWATER.

1. Process Wastewater - Inside Winery Building.
a. Station Code: B-1
b. Station Description: Wastewater at a point in the process wastewater system where all wastewater tributary to the process wastewater system that is collected from inside the winery building is present.
c. Purpose. The purpose of this station is for measurement of the total flow of process wastewater collected from inside the winery building.

2. Process Wastewater - Outside Winery Building.
a. Station Code: B-2
b. Station Description: Wastewater at a point in the process wastewater system where all wastewater tributary to the process wastewater system that is collected from the paved area outside of the winery building's main work entrance way on the northwest side of the winery building is present.
c. Purpose. The purpose of this station is for measurement of the total flow of all process wastewater (including contaminated storm water) collected from the paved area outside of the winery building.

3. Process Wastewater Pond Influent.
a. Station Code: B-3
b. Station Description: Wastewater at a point in the process wastewater system where all wastewater tributary to, to be discharged into, the process wastewater pond is present.

c. Purpose. The purpose of this station is for measurement of the total flow of wastewater into the process wastewater pond, and for analytical characterization of this water.

4. Discharges to the Process Wastewater Discharge Area (Final Treated Process Wastewater).

a. Station Code: E-2
b. Station Description: Wastewater at a point in the process wastewater system after, downstream of, all treatment processes, where all treated process wastewater to be discharged to the process wastewater discharge area is present.
c. Purpose. The purpose of this station is for measurement of all flows discharged to the process wastewater discharge area, and for sampling and analytical characterization of the quality of the final treated process wastewater to be discharged to land.

D. PROCESS WASTEWATER POND.

1. Pond Water in Pond Zone 1.

a. Station Code: P-1
b. Station Description: Water in the winery process wastewater pond in the first zone of the pond (i.e., between the influent point and the baffle wall), about two feet from the water's edge and 6 inches below the water surface.
c. Purpose. The purpose of this station is for monitoring pond water quality in this zone of the pond.

2. Pond Water in Pond Zone 2.

a. Station Code: P-2
b. Station Description: Water in the winery process wastewater pond in the second zone of the pond, (i.e., between the baffle wall and the effluent point), about two feet from the water's edge and 6 inches below the water surface.
c. Purpose. The purpose of this station is for monitoring pond water quality in this zone of the pond.

3. Pond Area Observations.

a. Station Code: PA-n
b. Station Description: At points on and around the pond perimeter berm suitable for making standard observations of the pond and pond berm conditions. At least one point shall be a point suitable for measuring the pond water level and depth.
c. Purpose. The purpose of these stations is for making standard observations, including pond water level and depth.

E. TREATMENT TANKS (Septic Tanks, Pump Tanks).

1. Sanitary Wastewater Recirculating Textile Filter System Processing Tank.

a. Station Code: SW2
b. Station Description: Tank that is part of the RTF System, which receives sanitary wastewater from the Cosentino Winery facility.

2. Sanitary Wastewater Recirculating Textile Filter System Filter Pod Tanks.

a. Station Code: SW3a, SW3b, SW3c, and SW3d (one code for each of four tanks, respectively)
b. Station Description: Tanks that are part of the RTF System, which contain the RTF filter media.

3. Sanitary Wastewater Effluent Holding Tank.

a. Station Code: SW4
b. Station Description: Tank that receives wastewater from the tablet chlorinator disinfection unit, used for disinfectant contact time and for pumping to the sanitary wastewater discharge area.

4. Process Wastewater Collection System Catch Basin.

a. Station Code: PW2

b. Station Description: Tank in the collection system at the north edge of the paved area on the north side of the winery building, used for collection and pumping of process wastewater from the paved area to the Process Waste Vault.

5. Process Wastewater Lift Station.

a. Station Code: PW3

b. Station Description: Pump station tank that receives process wastewater from the Cosentino Winery facility, and from which process wastewater is pumped to the process wastewater pond.

6. Purpose.

The primary purpose of these stations is for monitoring and reporting service events, and total volume of material removed from the respective tanks, for haul-away and disposal to an off-site location.

F. OTHER TREATMENT UNITS.

1. Tablet Chlorinator Disinfection Unit.

a. Station Code: O-1

b. Station Description: Device used in disinfection of the sanitary wastewater by introduction of chlorine to the wastewater stream by water contact with solid disinfectant tablets.

2. Sanitary Wastewater Scale Inhibitor Feed System.

a. Station Code: O-2

b. Station Description: Device (s) used to discharge scale inhibitor chemicals into the sanitary wastewater system, and/or location in the system where these discharges occur.

3. Sanitary Wastewater Microstrainer.

a. Station Code: O-3

b. Station Description: Microstrainer filtration device in the sanitary wastewater system prior to the sanitary wastewater discharge system subsurface drip dispersal pipe network.

4. Process Wastewater Hypochlorite Feed System.

a. Station Code: O-4

b. Station Description: Device(s) used to discharge hypochlorite chemicals into the process wastewater system, and/or location in the system where these discharges occur.

5. Process Wastewater Scale Inhibitor Feed System.

a. Station Code: O-5

b. Station Description: Device(s) used to discharge scale inhibitor chemicals into the process wastewater system, and/or location in the system where these discharges occur.

6. Process Wastewater Microstrainer.

a. Station Code: O-6

b. Station Description: Microstrainer filtration device in the process wastewater system, prior to the process wastewater discharge system drip irrigation pipe network.

7. Process Wastewater Discharge Pump.

a. Station Code: O-7

b. Station Description: Pump system used to pump treated process wastewater to the process wastewater discharge area.

8. Purpose. The purpose of these stations is for monitoring and reporting of all activities at the stations, including addition of chemicals to the wastewater streams, or removal of filtered materials from the wastewater streams, and for reporting unit service events.

G. DISCHARGE AREA OBSERVATION STATIONS.

1. Sanitary Wastewater Discharge Area.

a. Station Code: SD - n
b. Station Description: Points within and around the perimeter of the sanitary wastewater 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.

2. Process Wastewater Discharge Area.

a. Station Code: PD - n
b. Station Description: Points within and around the perimeter of the process wastewater 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.

H. GROUNDWATER.

1. Up-gradient Well.

a. Station Code: GW-1
b. Station Description: Groundwater at a monitoring well located up-gradient from the discharge areas, and representative of background groundwater conditions.

2. Down-gradient Wells.

a. Station Code: GW-2, GW-3 and GW-4
b. Station Description: Groundwater at each of three monitoring wells located down-gradient from the discharge areas, and representative of groundwater conditions down-gradient of those areas.

3. Purpose. The purpose of these stations is for observation and measurement of groundwater levels and for obtaining samples of groundwater for analytical characterization of the groundwater.

4. Locations. The locations of these wells will be determined in accordance with the Groundwater Monitoring Program technical report required by this Order.

V. MONITORING SCHEDULE and MONITORING 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 Notes. Table 1 includes references labeled “Notes”, given as parenthesized numbers, e.g., [1], [2], for particular monitoring parameters and/or monitoring stations. These references correspond to further monitoring specifications given below in Section V.B., Monitoring Specifications.

B. MONITORING SPECIFICATIONS.

1. Flow Monitoring and Reporting.

a. For stations A-1, A-2, B-1, B-2, B-3, E-1 and E-2, flows shall be monitored continuously and reported as Daily Flow, in gallons, for each day when flow at these stations occurs, and Monthly Total, in gallons.
b. For a station where flows are directly related to flows at another station, flows derived from one station may be used as representative flows for purposes of reporting flows at another station, provided that the Discharger has submitted technical report documentation acceptable to the Executive Officer that such representative flow monitoring will provide adequate and reliable recording and reporting of the identified wastewater system flows.

2. Sampling.

a. Sampling for monitoring analyses is required only when the identified part(s) or component(s) of the wastewater system associated with a given monitoring station is (are) in use.

b. For stations A-2, B-3, and E-1, sampling for the following parameters shall be conducted by means of 24-hour flow-weighted or time-sequenced composite samples: BOD, TSS, and Nitrogens.

3. Pond Water BOD Monitoring. Pond water monitoring shall include sampling and analysis of the water at station P-2 for BOD:

a. Monthly during Start-Up Monitoring (see also Specification B.11 below); and
b. Anytime when the Dissolved Oxygen level of water at station P2 is found to be less than 1.0 mg/L.

4. Nitrogens.

a. The parameter 'Nitrogens' in this SMP means all of the following parameters:
   (1) Ammonia Nitrogen,
   (2) Nitrate Nitrogen, and
   (3) Total Kjeldahl Nitrogen (TKN).
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. Groundwater Level. For all groundwater monitoring wells, stations GW-n, groundwater levels shall be measured, recorded and reported for each station, twice per month, in feet and inches.

6. 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 pond and discharge areas.

7. Chemical Dose Data. For all events involving discharge of supplemental materials into the wastewater system, such as addition of disinfectant, hypochlorite or scale inhibitor chemicals, the following shall be reported for each respective station:

a. Calendar date of the event;
b. Times of day when event started and stopped;
c. Component serviced (Monitoring Station, or narrative description);
d. Material added;
e. Reason material was added; and
f. Volume in gallons; and Concentration in mg/L, of the material added.

8. Service Event Data.

a. Haul-Away. For all service events involving removal of wastewater and/or solids (sludge) from the wastewater system for haul-away and off-site disposal, the following shall be reported:

(1) Calendar date of the service event;
(2) Times of day when service started and stopped;
(3) Component serviced (Monitoring Station, or narrative description);
(4) Total volume of material removed;
(5) Service Provider; and
(6) Final destination point of disposal (e.g., specific municipal wastewater treatment plant).

b. Process Wastewater Catch Basin Diverter Valve. For station PW2, any time the diverter valve is changed, the following shall be reported:
(1) Calendar Date and Time when changed;
(2) Person that made the change; and
(3) End-result status (e.g., destination of flow out of the catch basin).

9. Standard Observations. Standard Observations are defined in SMP Section III.

10. Pond Depth & Freeboard. Record and report pond water depth, and pond freeboard, in feet and inches.

11. Start-Up Monitoring. Monitoring frequencies shown in Table 1 as underlined frequency codes (e.g., M) indicate monitoring frequency applicable during system "Start-Up" periods. "Start-Up" periods are hereby defined as: (a) at least the six months of operation after system completion and start-up, or continuing until stable operations are achieved, if longer than six months; and (b) at any time when the treatment process experiences upset, shut-down, or any other unstable operations, and continuing for at least 30 calendar days following the start of such event, or continuing until stable operations are achieved, if longer than 30 days.

C. 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.

D. 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 periodically 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.

E. 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 Provision 7 of this Order. This SMP includes monitoring and reporting requirements for that program, with the exception of the specific monitoring stations, groundwater monitoring wells. Specifications and locations of these monitoring stations are to be addressed in the Groundwater Monitoring Program technical report required by Provision 7 of this Order. Groundwater monitoring shall be implemented in accordance with the requirements of Provision 7. If any revisions to the groundwater monitoring and reporting requirements specified in this SMP are necessary, such as in response to the technical report required by Provision 7 or other new information about groundwater or groundwater monitoring related to the discharges, such revisions shall be specified, in writing, by the Executive Officer.

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 Board in writing, with a technical report which 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 BOARD

A. MONITORING REPORTS.

The Discharger shall submit to the 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 Board by the last day of the month following the monitoring period.

b. Annual Reports. Written reports shall be prepared for each annual monitoring period (April 1 through March 31) and shall be submitted to the Board by May 15th following the monitoring period.

2. Transmittal Letter.

A letter of transmittal shall accompany each monitoring report submitted to the 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 follow-up discussions as may be needed; and
(4) The name of the 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 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 which 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, 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:

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

the Discharger or Discharger's agent(s) shall notify the 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 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. BOARD ADDRESS and PHONE NUMBER.

This 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 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 SUBMITTED to OTHER ENTITIES

A. MONITORING REPORTS.

For each monitoring report required to be submitted to the Board, a complete copy of the report shall be submitted, at the same time that the report is submitted to the Board, to the Napa County Environmental Management Department, at their current address. As of Order adoption, their current mailing address is:

Napa County Environmental Management Department
1195 Third Street, Room 101, Napa, CA 94559

B. REPORTS OF VIOLATIONS.

For any violation of waste discharge requirements that involves potential immediate threat to public health or impacts to adjacent properties, including discharges of inadequately treated wastewater, or overflows or spills from the wastewater system, the Discharger shall notify the property owners of the adjacent residential properties by telephone as soon as the Discharger or Dischargers agent have knowledge of the incident.

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 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: _____.

_____
BRUCE H. WOLFE
Executive Officer

[File No. 2139.3135]
[WDID No. 2 283135001]
[Prepared by BDA]
[Reviewed by WBH, WKB]

C:\ ... \R2-2006-0076-SMP.DOC

TABLE 1 - SCHEDULE for MONITORING

Monitoring Station:			A-1	A-2	E-1	E-1	B-1 & B-2	B-3	B-3	E-2	P-1	P-2	PA-n	SD-n & PD-n	O-1, -2, -4, & -5	SWn & PWn	All GW
			Sanitary Waste water	RTF Influent	SW Dis-charges: "Startup"	SW Dis-charges	Process Waste water	Pond Influent: Noncrush	Pond Influent: Crush	PW Dis-charges	Pond Water	Pond Water	Pond Area	SW & PW Dis-charge Areas	Chem-ical Feed Devices	Treat-ment Tanks	Ground water Wells
Type of Sample:			F	F, G, C	F, G, C	F, G, C	F	F, C	F, G, C	F, G	G	G	O	O	F, G	F	G, GL
Parameter	**(units)**	**[Notes]**		[2]	[2],[11]	[2]		[2]	[2]	[2]	[3]	[3]			[7]	[8]	
Flow Volume	(gallons)	[1]	Cont.: D&M	Cont.: D&M	Cont.: D&M	Cont.: D&M	Cont.: D&M	Cont.: D&M	Cont.: D&M	Cont.: D&M					Event	Event	
$BOD_5 20^oC$	(mg/L)	[2][3]		2/M; M	2/M	M		M; Q	2/M	W		M; E					
TSS	(mg/L)	[2]		2/M; M	2/M	M		M; Q	2/M	W							
Temperature	(degrees F or C)			2/M; Q	2/M	M			W	W	W	W					
pH	(pH units)			2/M; Q	2/M	M			W	W	W	W					M
Dissolved Oxygen	(mg/L)			2/M; Q	2/M	M			W	W	W	W					
Fecal Coliform	(MPN/100 ml)				2/M	M											M
Chlorine Residual	(mg/L)				W	W				W							
Phosphate	(mg/L as Phosphate)					M				W							
Nitrogens	(mg/L as N)	[2][4]		2/M; Q	2/M	M			2/M	W							M
Total Dissolved Solids	(mg/L)			Q	M	Q			M	W							
Conductivity	(micromhos/cm)			2/M; Q	2/M	M			W	W							M
Groundwater Level	(feet & inches)	[5]															2/M
Precipitation	(inches)	[6]											Cont.: D&M				
Chemical Dose Data (Date, Time, etc.)		[7]													D		
Service Event Data (Date, Time, etc.)		[8]											Event		Event	Event	
Standard Observations		[9]											W	W			
Pond Depth & Freeboard (feet & inches)		[10]											W				